CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, June 30, 1910.

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RAILWAYS.

(*Denotes that this work is advertised in Engineering News.)

ALABAMA.—Preliminary steps in the formation of a company with a capital stock of $200,000 to build the proposed railroad from Selma, Ala., up the Cahaba Valley to the Birmingham district will be taken soon. A committee has been appointed in Selma with L. M. Hooper, Chn., and W. A. Anderton, Secy.

ALASKA.—Survey is to be started soon, it is reported, for a line to be built from Controller Bay, Alaska, into the Bering River coal fields in Alaska, about 22 miles. H. White, Los Angeles, Cal., and C. A. L. Alisky, Portland, Ore., are interested. A railway company known as the Controller Ry. & Navigation Co. was fully noted on Jan. 6.

ALASKA NORTHERN.—It is announced that this company has track laid on 71 miles from Seward, Alaska, north. The company expects to have 170 miles of line ready next month for inspection by contractors preparatory to their being asked for bids on work to cost about $7,000,000. The line is eventually to be extended north via Fairbanks and Chena to Chatanika. O. G. Laberee is Pres. and Gen. Mgr., Seattle, Wash. A. W. Swanitz, Ch. Engr., Seward, Alaska. Noted on June 16.

ATCHISON, TOPEKA & SANTA FE.—Projected improvements calling for the expenditure of $3,000,000 by the Santa Fe Lines in California have been abandoned, it is announced. The reason, according to a statement purporting to come from officers of the company, is that the government's action in holding up the proposed increase in freight rates made it impossible to procure the necessary money on favorable terms.

The Santa Fe has given orders that all of the improvement work now under way in Texas shall immediately cease, according to the Houston (Tex.) "Post," and the officials decline to make any statement as to the probability of a resumption in the near future. "The official statement comes from J. P. Cowley, chief clerk to F. G. Pettibone, Gen. Mgr., who states as a reason for the order that: 'This course is being taken because it is quite apparent that the present revenues being received by the road will not warrant any further expenditures for improvements excepting work which we are absolutely obliged to do. The recent decisions by the United States Circuit Court and the recent reductions in rates in Texas have caused orders to be issued that every economy should be exercised in the operation of the properties.' The Santa Fe has several extensions under way in various parts of the State and others have been announced as in contemplation. Work on all these is to be stopped at once with the exception of the San Angelo-Sterling City branch, the Lometa-San Saba branch and the Texico-Coleman cutoff, any of which will give shorter routes to tidewater and are therefore in the nature of economy. The grade revision on the Lampasas branch is to be continued for the reason that the contract has been carried to a point where the work cannot well be stopped. All bridge work is suspended and the announced plans for the expenditure of $200,000 on the yards at Cleburne and the work at Temple, where about $250,000 was to be expended in various ways, are included in the plans which are not to be put through. The officials at Galveston do not give out the exact figures, but the guess is made and apparently upon the authority of the officials that nearly 1,000 men will be turned loose by the road and the contractors who have been working on the Santa Fe projects. This order is taken as the reply of the Santa Fe to the Texas commission's rate reductions and improvement orders."

Press reports from Chicago, quote E. P. Ripley, Pres. of the Santa Fe, in stating that all improvement and extension operations on the Sante Fe which can be stopped without incurring more expense than would be the result of going on will be held up pending determination of the freight rate question and observation of the working of the amendment to the interstate commerce law. "We had proposed for the next two years an expenditure of $50,000,000 principally in double-tracking and ballasting," Mr. Ripley said. "Operations have been discontinued on more than half of it, and no new track work will be taken up."

BALTIMORE & OHIO.—Improvements to be made by this company in Lake County, Ind., according to the Indianapolis "News," call for "the expenditure of more than $5,000,000 and an entire change in its route in the west end of the county. The principal items include the following: The abandonment of the route between Pine and Chicago, via South Chicago, the latter station to be put off the main line. The new right-of-way to Chicago will be over the tracks of the Chicago & Calumet Terminal Ry., which the Baltimore & Ohio recently purchased for $20,000,000. The right-of-way will make East Chicago, Hammond and Dalton, Ill., important stations on the Baltimore & Ohio. The present right-of-way from Pine to Indiana Harbor will be taken over by the Elgin, Joliet & Eastern Ry., which is owned by the United States Steel Corporation. South Chicago will lose the Baltimore & Ohio shops and yards, which will be removed to Miller, where the company intends to build larger shops and one of the biggest clearing yards of its trans-Ohio lines." A. M. Kinsman is Ch. Engr., at Baltimore.

BATESVILLE & SOUTHWESTERN.—This Company has been incorporated in Mississippi by Judge Edward Mays, T. Lamar Ross, Lucius Mays, all of Jackson, Miss., and J. C. Longstreet, of Grenada, Miss. This company is to build a line from Batesville to Charleston, in Tallahatchie County, about 25 miles. The Mayor and Board of Aldermen of Batesville have granted right-of-way to the Batesville & Southwestern R. R. Co. from the south corporation line to the depot, along the right-of-way of the Illinois Central. The line is to be constructed by R. J. DARNELL, of Memphis, Tenn. It is expected to have the line completed to Glenn's Ferry on Yocony River by the end of the year. Right-of-way for most of the distance has been secured. The R. J. Darnell Co. contemplates erecting a sawmill at Batesville.

BOSTON & MAINE.—G. M. Thompson, Asst. Engr., Wakefield, Mass., is at Windsor, Vt., with eight assistants to make the outline for the preliminary survey of the branch line which will run from a point 500 ft. south of the railroad bridge abutment at Windsor to West Lebanon, N. H., 15 miles. It will be on the east side of the river. When the new road is completed the Boston & Maine will discontinue its use of the Central Vermont track between Windsor and White River Junction, which was laid in 1848.

CANADIAN NORTHERN QUEBEC.—Contract has been awarded to J. P. MULLARKEY, Montreal, Que., to build the line from Hawkesbury, Ont., east to Montreal. H. K. Wicksteed is Ch. Engr., Toronto, Ont.

CARNESVILLE RY.—Organized, with headquarters at Toccoa, Ga., to build a line about 20 miles long from Toccoa, Ga., via Mize and Red Hill to Carnesville. Capital, $200,000. Incorporators are W. S. Erwin, J. H. Hicks and E. S. Hunnicutt, of Clarkesville, Ga.; G. W. Edwards and W. G. Davis, of Toccoa, Ga.; J. C. Andrews and W. H. Parker, of Mize, Ga.; W. R. Whiting and W. P. King, of Red Hill, Ga.; S. J. Oliver, L. F. Lehardt, J. W. Landrum and J. R. Hall, of Carnesville, Ga.

CHESAPEAKE & OHIO.—H. Pierce, Ch. Engr., advises us that the report that this company would build an extension to the Guyandot Valley branch is erroneous. No such extension is authorized or contemplated at this time. Noted on June 2.

DECATUR & FALLS CITY.—Company will apply for a charter in Alabama, under the name of the Decatur & Falls City Development Co., to build a railroad from Decatur to Falls City, Ala., about 80 miles. Survey has been started. The directors are: Pres., E. H. Allison, of New Decatur; Vice-Pres., D. W. Day, of Hartselle; Secy., Charles Bassett, of New Decatur; Treas., J. H. Calvin, of Decatur; J. I. Armstrong, of Cullman, Ala., and H. B. Beard and Chas. H. Austin, both of New Decatur. Headquarters are at New Decatur, Ala. E. J. Wind is Ch. Engr.

HALIFAX & EASTERN.—The Nova Scotia Provincial Government has granted a charter to the Halifax & Eastern Railway Co. to build and maintain a railway from Dartmouth, Halifax Harbor, to Country Harbor, N. S., with a branch line from the Intercolonial Ry. at or near New Glasgow to the New line charter. The new line must be in actual operation within two years. Thomas Goff, of Toledo, Ohio; John Bertran, of Toronto, Ont.; and Siegmund Hirch, of London, are among the directors of the company, which is capitalized at $3,000,000. T. B. Fogg, Toledo, Ohio, is Gen. Mgr.

LEHIGH VALLEY R. R.—The stockholders of the Lehigh Valley R. R. Co., at a special meeting held on June 22, in Philadelphia, voted to increase the capital stock of the company from $40,334,800 to $80,000,000, as recently proposed by the directors. The stockholders also authorized the directors to issue and dispose of as much of the additional stock as they thought necessary for paying the debts of the company, constructing and completing the railroad and to construct branches not exceeding twelve miles in length. The directors, immediately upon receiving the authority of the stockholders, held a meeting and authorized the issuance of $20,220,500 of the additional stock. E. B. Thomas, Pres., stated that "during the first ten months of the present fiscal year over $3,380,000 has been expended for new equipment, additional tracks and the general improvement of the property. There have been authorized and are now under way further similar improvements estimated at $3,776,000."

"There is in contemplation, provided the future business of the company will justify it, the further expenditure of several millions for extending the third and fourth track system of the company, $4,000,000 or $5,000,000 for the acquirement of additional terminals and the construction of a low grade line from the anthracite coal region for the movement of westbound coal to the main line, to do away with the existing heavy grades, which it is estimated will cost from $1,500,000 to $2,000,000. Such expenditures ought not to be deducted from the net income of the company, and it is obviously necessary, therefore, to adopt a financial plan that will provide the company with the needful funds." Noted last week.

MEXICO.—A. F. Tarin, of Hermosillo, Sonora, is endeavoring to secure a concession for his railway in the State of Sonora. The road will start from Kino Bay, a point about 45 miles west of Hermosillo and along the Sonora River, to Ures, thence to Arizpe, and from that point to Agua Prieta, just across the Mexican border from Douglas, Ariz.

A concession has been granted by the Mexican Government to V. Mistretta, of Galveston, Tex., to construct a railroad through the heart of the banana-growing territory of Tabasco. Mr. Mistretta is Pres. of the Southern Steamship & Importation Co., which does a large business exporting bananas to the United States through Galveston. He is financing the road in the United States. The Mexican Government has taken steps to improve the harbor of Frontera so as to permit the entry of large ocean-going vessels.

NEBRASKA & DAKOTA.—Articles of incorporation have been filed in South Dakota by this company, with a capital of $4,500,000 and headquarters at Pierre, S. Dak. Business office is to be in Chicago. The plans call for a line from Murdo, S. Dak., south via the counties of Lyman, Mellette, Todd and Tripp, in South Dakota, and Keyapaha, Rock, Loup and Garfield, in Nebraska, to Burwell, 180 miles. The Incorporators include Albert Martin, Paul Miller, Samuel C. Ware, B. McWilliams and Charles J. Ruebling, all of Chicago, and L. L. Stephens, of Pierre.

•NEW MEXICO.—See item under Miscellaneous Contracts; Railway Grading and Bridges.

PENNSYLVANIA R. R.—Contract has been awarded to A. L. ANDERSON & BRO., Altoona, Pa., for double-tracking a 5-mile section between Keating Summit, Pa., and Relay.

SOUTHERN PACIFIC.—Wm. E. Alger, U. S. Consul at Mazatlan, Mexico, reports that the Southern Pacific Railway, building along the Mexican west coast, is expected to reach Guadalajara in about 18 months. It has reached the Santiago River, in the Territory of Tepic, and the line from Acaponeta to the river is being opened to traffic.

WABASH.—A. O. Cunningham, Ch. Engr., St. Louis, Mo., advises us that contract has not been awarded for the proposed section between Adrian, Mich., and Oakwood, Ohio, and has been postponed for some time.

ELECTRIC RAILWAYS.

NEW YORK, N. Y.—The franchise of the Manhattan Bridge Three-Cent Fare Line has been granted by the Board of Estimate and Apportionment. All that remains to be done is determining the terms and conditions, and when these are agreed to the franchise agreement will be formally executed between the company and the city. However, before the company can begin operation it will have to secure the certificate of public necessity from the Public Service Commission. As noted on March 10, John C. Breckinridge, 95 Liberty St., Vice-Pres. of the Manhattan Three-Cent Line, and formerly general manager of the Brooklyn Rapid Transit Co., gave details of the financial estimates of the new company, at a hearing before the Public Service Commission. Mr. Breckenridge estimated that the cost of power houses, car barns, trackage, cars, etc., would be about $650,000. To this he added $200,000 for preliminary expenses, such as counsel fees, engineers' salaries and promotion costs. Noted on Jan. 13.

MONONGAHELA, PA.—J. S. Morrow, Engr. of the Pittsburg, Monopgahela & Washington Ry. Co., has stated that the work could at once be resumed and completed very soon on that section of the line which passes through Monongahela. Cars must be in operation by the middle of September in order to retain the company's franchise in Monongahela.

TACONY, PA.—The Holmesburg, Tacony & Frankford Elec. Ry., connecting Philadelphia, Frankford, Tacony, Holmesburg and Torresdale, Pa., was sold under decree of the U. S. District Court. It was bought by George B. Atlee & Co. for $375,000, on behalf of a syndicate composed of Jacob S. Disston, Pres. of the Tacony Trust Co.; Meyer Schamberg, Pres. of the West Chester Street Ry. Co.; William L. Allen and George B. Atlee & Co.

WILKES-BARRE, PA.—The West Shore Ry. Co. will let contracts soon for building its proposed 8-mile line to connect Pittston, Forty Fort, Wyoming, Exeter, West Pittston and Wilkes-Barre. J. L. Dunn, 54 Public Square, Wilkes-Barre, is Secy.

WILLIAMSPORT, PA.—The Sylvan Dell Park Co., chartered in Pennsylvania, plans to start construction this summer on its proposed 3¼-mile electric railway to connect Williamsport and Sylvan Dell Park. Capital stock, authorized, $24,000; issued, $7,000. Headquarters, 129 West Fourth St., Williamsport. Power station and repair shops to be located at South Williamsport. H. W. Whitehead, 129 West Fourth St., Williamsport, is Pres.; W. B. Stuart, Vice-Pres.; Charles G. Whitehead, Secy.; E. M. Bates, Treas.

NEW CASTLE, PA.—The Mahoning & Shenango Railway & Light Co. has secured right-of-way to construct an extension from Youngstown to Mineral Ridge, a distance of five miles. M. E. McCaskey, Youngstown, Ohio, is Gen. Mgr. Noted on March 24.

SALISBURY, N. C.—The Salisbury & Spencer Elec. Ry. Co. has been organized to build a railway between Salisbury, Concord and Spencer. Capital stock, $400,000. W. F. Snider is Pres. and Treas.; T. H. Vanderford, Vice-Pres.; T. J. Jerome Secy.; H. W. Frund, Supt. Clement & Clement and Jerome & Maunes are attorneys.

RUTHERFORDTON, N. C.—Surveys have been completed by the Isothermal Traction Co. from Rutherfordton towards Gastonia, via Caroleen, Shelby and Cherryville. Another survey will now be made from Rutherfordton to Asheville, via Chimney Rock and Fairview, crossing the Blue Ridge at Hickory Nut Gap. The necessary franchises have nearly all been secured, and right-of-way is now being obtained. Connections will be made with the Seaboard Air Line, the Southern Railway and the Carolina, Clinchfield & Ohio Ry. K. S. Finch, Charlotte, is Gen. Mgr. Noted on March 17.

WACCAMAW (Georgetown post-office), S. C.—A. A. Springs, J. T. Hazard, H. B. Springs, S. J. N. Lachicotte and Joseph Schenk, of Waccamaw, have organized the Waccamaw Transportation Co. with $10,000 capital stock.

SUMMIT, MISS.—The Summit & McComb Motor Line Co. will soon incorporate. Its proposed line, which will be five miles in length, is under construction. It will connect Summit and McComb City, reaching the Godbold Mineral Wells and Summit. Station and repair shops will be at Summit. Capital stock authorized, $40,000. Ted Blackmore is Pres. and Treas.; Dr. V. Simmons, Vice-Pres.; Clem V. Ratcliff, Secy. and Gen. Mgr.; J. E. Randall, Gulfport, Miss., is Engr. Noted on June 9.

COVINGTON, KY.—The Covington, Big Bone & Carrollton R. R. Co., which was recently given a franchise to enter Covington, as noted on May 19, has given a bond of $25,000 to the City Council of Covington to insure the completion of the work of the company. The company plans to build a 22-mile railway between Covington and Big Bone. M. J. Crouch is interested. Noted on March 31.

NAPOLEON, OHIO.—The Fostoria, Napoleon & Defiance Ry. Co., of Toledo, has asked the Council for a franchise to build an electric railway through Napoleon. This company plans to build a railway through Seneca, Wood, Henry, Hancock and Defiance County. Charles A. Bliss, Bowling Green, Ohio, is Pres. Noted on March 31.

DECATUR, IND.—A. W. Fishbaugh, Ch. Engr. of the Fort Wayne & Springfield Ry. Co., advises us that company will not let contracts for building the 28-mile extension between Decatur and Portland, but will use its own forces. The extension is now graded to Monroe, six miles south of Decatur. Noted on June 2.

FORT WAYNE, IND.—The Fort Wayne & Winona Traction Co. has been organized in Fort Wayne with a capital stock of $100,000. Its directors are J. A. Barry, Edward G. Hoffman, Ernest W. Cook and Gaylord M. Leslie, of Fort Wayne, and Ralph A. Barry, of New York. Incorporation papers have been filed. The new interurban line is to parallel the Pennsylvania R. R. between Fort Wayne and Warsaw, a distance of 40 miles, in the course of which it will touch Arcola, Coesse, Columbia City, Larwill, Princeton, Wooster and Winona Lake. Estimated cost, $1,000,000. Wm. Fowler, of Wabash, Ind., is Ch. Engr.

ELDORADO, ILL.—We are officially advised that the Egyptian Traction Co., which will build an electric railway 100 miles long from Mt. Vernon, Ind., to Murphysboro, Ill., has made surveys and has secured 50% of its right-of-way. Capital has been obtained. Geo. E. Leggett is Pres., Winchester, Ind.; G. E. K. Hixon is Gen. Mgr., and R. B. Clark is Ch. Engr., both at Eldorado. Noted on April 21.

MARION, ILL.—The Egyptian Traction Co., of Eldorado, will apply to Council for a franchise to build an electric railway in Marion. See Eldorado, Ill., item.

DAVENPORT, IOWA.—Citizens will raise $200,000 toward building an interurban line between Davenport, Iowa City, Grinnell, Des Moines and Atlantic. A. P. Chamberlain and G. W. Rhine, of Des Moines, are interested.

IOWA CITY, IOWA.—J. O. Schulze, Pres. and Engr. of the Iowa City Elec. Ry. Co., advises us that contracts will be let at once for building about 3.8 miles of overhead trolley line. Noted on Dec. 9, '09.

LEWISTON, MONT.—E. N. Begeman proposes to build an electric railway between Lewiston and Holland, for which $100,000 will be subscribed toward the project in Lewiston, it is stated.

ST. JOSEPH, MO.—The St. Joseph & Savannah Interurban R. R. Co., it is announced, has awarded the contract for the construction of its proposed 15-mile interurban railway to the J. L. FLICK CONSTRUCTION

CO., Chicago. This line will connect St. Joseph and Savannah, as officially noted on Nov. 4, '09. C. W. Campbell is Ch. Engr., St. Joseph.

SAN ANGELO, TEX.—The San Angelo St. Ry. Co. has under consideration the extension of its street railway system to the southern and western portions of this city. E. E. Bailey is Vice-Pres. Noted on Aug. 26, '09.

AUSTIN, TEX.—The franchise election held on June 22 resulted in a victory for the proposed new railway company composed of Charles V. Burkhead and associates of San Antonio. This company secured a 32-year franchise to the streets of Austin, where there is now no tracks, for street car purposes. This was the first election of the kind ever held in Austin. Noted on June 16.

HOUSTON, TEX.—The Houston Electric Co. has been granted a franchise to extend the South End line to the Rice Institute, including double-tracking. It will be about two miles long. The Stone & Webster Corporation, Boston, Mass., are Gen. Mgrs. David Daly, Houston, is Local Mgr.

EL PASO, TEX.—The El Paso Elec. Ry. Co. announces that application has been made for authority to increase its capital stock from $1,500,000 to $2,500,000, the proceeds of the $1,000,000 of new stock to be used in improvements and new equipment. The Stone & Webster Corporation, Boston, Mass., are Gen. Mgrs. H. S. Potter, El Paso, is Gen. Supt.

SWEETWATER, TEX.—The City Council has granted a street railway franchise to C. M. McLain, G. E. Romsey and W. E. Barrow, of this city. The contract provides that within two years three miles of the line must be in operation.

ENID, OKLA.—The Enid City Ry. Co. may let contract soon for building new track and overhead work on a line 1½ miles long. C. H. Hosler, Commercial Bldg., Dayton, Ohio, is Pres. C. Kline is Mgr., Enid.

COLORADO SPRINGS, COLO.—Incorporation papers for the Colorado Springs & Cripple Creek Aerial Tramway Co., capitalized at $500,000, have been filed at the office of the County Clerk. The incorporators are: H. McGarry, L. L. Aitken, E. W. Giddings, Peter H. Holme and Orville L. Dines. The directors for the first year are: E. W. Giddings, H. McGarry, John T. Milliken, F. H. Logan, A. E. Carlton and E. F. Smith. The principal offices of the new company are to be in Colorado Springs, but branch offices will be established in St. Louis and Cripple Creek. The purposes of the company are for the transportation of ores from the Cripple Creek district to the mills in this district and for carrying coal from the mines north of this city to the Cripple Creek district. The surveys for the line have been completed by Sawyer & Garstin and specifications and plans are now being made so that a contract can be let in the near future for the construction of the tramway. The line will be about 17 miles long.

LAS CRUCES, N. MEX.—Isidore Armijo and Samuel Reynolds, of Las Cruces, have been granted a franchise by the Town Board to build a 2-mile narrow-gage street railway to College Heights and Mesilla Park.

SAN FRANCISCO, CAL.—The Board of Supervisors has granted to A. J. Pon, of the Fillmore Street Improvement Association, a franchise for the seven blocks over Gough St., connecting Market St. with McAllister St. This improvement has been known as the "Gough-Street loop."

SALT LAKE CITY, UTAH.—The Salt Lake & Ogden Ry. Co., which recently electrified its system, may soon double-track its lines. The railway connects Salt Lake City, Bountiful, Farmington, Kaysville, Clearfield, Roy, Riverdale and Ogden. Simon Bamberger is Pres. and Gen. Mgr., and E. A. Vail is Ch. Engr., 161 Main St. Noted fully on Aug. 26, '09.

BERLIN, ONT.—Bids will be received by the People's Ry. Co., Berlin, until July 15 for clearing and grading 29 miles of its proposed railway, construction of five bridge piers and one 400-ft. bridge, also for the following material for the same length of the line: Ties, 70-lb. T-rails, spikes, bolts, rail bonds, grooved trolley wire, trolley messenger wire, 50 miles of fence wire, gates and fence posts. A. N. Warfield, Berlin, is Gen. Mgr. Noted on July 29, '09.

LIGHT AND POWER PLANTS.

(denotes that this work is advertised in Engineering News.)*

HOLYOKE, MASS.—W. H. Snow, Mgr. Municipal Electric Light Plant, has awarded contract for putting in the foundations for additions to the plant to DANIEL O'CONNELL'S SONS, at $3,280. Contracts for equipment to be placed on the foundations have been awarded.

*FORT ANDREWS (Boston post-office), MASS.—Contract has been awarded for the construction of the electric lighting system here to the LORD ELECTRIC CO., 213 West 40th St., New York, at $10,323. Bids were opened on June 6. List of bidders noted on June 9. Capt. A. M. Miller is Constructing Q. M., U. S. A., 263 Summer St., Boston.

HOPEDALE, MASS.—The Draper Co., of Hopedale, manufacturers of looms and textile machinery, is enlarging its plant and equipping a large portion of the machinery for electric motor drive. The ALLIS-CHALMERS CO., of Milwaukee, Wis., has been awarded contract for electrical apparatus, including a 1,250-KVA., 600-volt, 60-cycle, 3-phase, 3,600 r. p. m., steam turbo-alternator; a 15-KW. turbine-driven exciter and a 15-KW. motor-driven exciter; a 3-panel switchboard; one 300-HP. and one 400-HP. wound rotor, induction motors.

WORCESTER, MASS.—The Royal Worcester Corset Co., of Worcester, has been granted a permit to enlarge its power-house in the rear of Wigwam St. The NORCROSS BROS.' CO. has contract for construction. Estimated cost, $10,000.

OGDENSBURG, N. Y.—The Committee representing the Water Power Owners' Association of Ogdensburg awarded contract on June 9 for erecting the new concrete dam across the Oswegatchie River and for incidental work, to WALTER BRADLEY, of Fulton, N. Y. Estimated cost, $10,000.

NEW YORK, N. Y.—Bids were received as follows on June 22 for all labor and materials required for the interior finishing, electric fixtures, apparatus, mortuary compartments and all other work for the entire completion of a new pathological building at the Kings County Hospital, Boro. of Brooklyn: D. J. Ryan, 38 Park Pl., New York, $10,199; J. M. Knopp, $12,190; Grant-Rohrer, $13,819; Cowden & DeYoung, $10,-990.

NEW YORK, N. Y.—Bids are asked by the Park Board until 3 p. m., July 21, for all materials and labor required for furnishing and installing electric lighting fixtures in the Metropolitan Museum of Art, located in Central Park, on the west side of Fifth Ave., opposite 82d St., Boro. Manhattan; for all materials and labor required for furnishing and installing electric lighting fixtures in new addition (F) of the Metropolitan Museum of Art; for all labor and materials required for changes in old electric feeder system and rearrangement of night light control for the Metropolitan Museum of Art; for labor and material required for furnishing and installing a system ventilation in the attic story of the east wing (D) of the Metropolitan Museum of Art.

Bids are asked until 3 p. m., July 11, by C. B. J. Snyder, Supt. School Bldgs., for completing and finishing the electric equipment in Public School No. 101, on the north side of East 111th St., about 43 ft. west of Lexington Ave., Boro. Manhattan, in accordance with the original plans and specifications of contract awarded to E. J. Duggan, which has been declared abandoned.

LONG ISLAND CITY (L. I.), N. Y.—The following bids were opened on June 6 by C. B. J. Snyder, Supt. School Bldgs., New York, for installing electric equipment in School 77, Covert Ave. and George St., Ridgewood Park, Boro. Queens: Cowden & De Young, Inc., $12,833; T. F. JACKSON, INC., 94 John St., New York, $11,243 (awarded contract); New York Construction Co., $11,700; Commercial Construction Co., $11,649; Reis & O'Donovan, Inc., $13,480; Griffin & Co., $13,413. Bidders noted on June 9.

TOMPKINSVILLE, N. Y.—The following bids have been received by the Inspector of the Third Lighthouse District, Tompkinsville, for furnishing and delivering four turbine electric generating units for use at general lighthouse depot, Tompkinsville: KERR TURBINE CO., New York, $19,500 (awarded contract); Fort Wayne Electric Wks., New York, $22,000.

PHILADELPHIA, PA.—JOHN R. WIGGINS & CO., 1215 Filbert St., Philadelphia, have been awarded contract for a storage plant, one story, brick and concrete, 90 x 150 ft., for the Philadelphia Electric Co., on Ranstead St. and 21st St. John T. Windrim is Arch., Commonwealth Bldg., Philadelphia. Noted on June 16.

WASHINGTON, D. C.—Bids were received as follows on June 23 by James Knox Taylor, Supervising Arch. Treasury Dept., Washington, D. C., for furnishing lighting fixtures at various United States buildings: David J. Brown Mfg. Co., Chicago, $10,580; Edward Miller Co., Meriden, Conn., $8,589; Cassidy & Son Mfg. Co., New York, $12,492; Reading Chandelier Works, Reading, Pa., $10,160; F. Storsberg Co., Newark, N. J., $8,423.

*BEDFORD CITY, VA.—Bids will be received until July 13 by the Light Committee, T. C. Dennis, Chn., for constructing a hydroelectric plant, on the James River and a transmission line about 25 miles and furnishing and installing machinery for a substation. F. R. Weller is Engr., Washington, D. C.

GRAFTON, W. VA.—The Inter-State Gas Co., of Huntington, W. Va., has awarded contract to BOOTH & FLINN, LTD., of Pittsburg, Pa., to construct a gas pipe line from Lincoln County, West Virginia, to Huntington. It is understood that about $250,000 will be expended, the line to include 24 miles of 10-in. high pressure gas mains.

CHARLESTON, S. C.—Bids are asked by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., July 16, for two 100-KW. synchronous motor generator sets, one 2½-KW. booster set and switchboard controlling equipment, at navy yard here.

LA FAYETTE, GA.—See item under Water Supply-Irrigation.

FORT MORGAN, ALA.—Contract for installing the electric lighting system in the buildings at Fort Morgan and for erecting pole lines, street lamps, fixtures, etc., has been awarded to the MOBILE ELECTRICAL SUPPLY CO., of Mobile, at $18,217 for items 1, 2 and 3; to HARRISBURG FOUNDRY & MACHINE WORKS, of Harrisburg, Pa., at $3,050 for item 4; to WESTINGHOUSE ELECTRIC & MFG. CO., Baltimore, Md., at $4,827 for item 5.

KNOXVILLE, TENN.—The ALLIS-CHALMERS CO., of Milwaukee, Wis., has been awarded contract by the Knoxville Ry. & Light Co. for a 3,000-KW., 2,300-volt, 60-cycle, 3-phase, steam turbo-alternator. Ford, Bason & Davis, New York, are Engrs.

A charter of incorporation has been granted to the Watauga Power Co., with a capital stock of $150,000. This company has begun the work of building a dam across the Watauga River, at Horseshoe Bend, in Carter County, to develop electric power for the industries of Bristol. The incorporators are: H. H. Skelton, E. C. Alexander, M. A. Wells, J. C. Price and J. D. Jenkins.

INDIANAPOLIS, IND.—The Indianapolis Traction & Terminal Co. has awarded to the BEDFORD STONE & CONSTRUCTION CO. the general contract for the construction of its new power house in West Tenth St., west of White River. The contract price is $280,-000. This covers everything except the smoke stack and the mechanical equipment of the power plant. The general contractor has sublet the contract for the steel construction work to the BROWN-KETCHAM IRON WORKS, at about $80,000. Work has started on the foundation for the building, and it is the plan to have the structure completed and ready for occupancy by Jan. 1, 1911.

*STURGIS, MICH.—Plans and specifications are on file at the office of Engineering News, New York, for Contract No. 1, a brick and concrete water-power station building and excavation for a tail race; Contract No. 2, a concrete multiple arch spillway and an earth embankment. The approximate quantities of the principal items will be: Contract No. 1, for building 1,900 cu. yds. of excavation, 1,100 cu. yds. of concrete, 16 tons of steel reinforcing and 70,000 brick; for tail race, 2,000 to 4,000 cu. yds. of excavation; Contract No. 2, for spillway, 4,500 cu. yds. of excavation, 1,900 cu. yds. of concrete, 23 tons of steel reinforcing; for embankment, 24,000 cu. yds. of fill. Bids are asked until July 6.

BAY CITY, MICH.—The City Council has decided to accept the proposition of the TITABAWASSEE POWER CO. to furnish electricity to operate the municipal electric system. The contract will go into effect July 1, 1911, and will mean the abandonment of the present municipal plant and the erection of a new station to distribute energy received from the company.

ROCKFORD, ILL.—The HIRSCHBERG-WILLIAMS-WASHBURN CO., Engrs., are preparing plans for a brick and steel power-house to be erected by the Barber-Pullman Co., at Rockford, 80 x 80 ft., 10-ton crane. Owners will take care of the mechanical equipment.

ANSLEY, NEB.—On June 6 the citizens voted to issue $12,000 of bonds for the erection of an electric light plant and extensions to water-works system.

ANSLEY, NEB.—See item under Light and Power Plants.

PIERRE, S. DAK.—Bids will be received until July 22 by the State Capitol Commission, Pierre, John Herning, Secy., for furnishing and installing an 80-HP. natural gas engine in the power plant at the State Capitol, engine to be connected with the dynamos and to be used to produce power for the lighting and power system of the building; also separate bids for a natural gas receiver and separator to be installed on the Capitol grounds. Bids will be received for a 340,000-ft. and a 50,000-ft. capacity, respectively.

ST. LOUIS, MO.—Bids were received as follows on June 27 by James Knox Taylor, Superv. Arch, Treasury Dept., Washington, D. C., for the installation of an electric conduit and gas piping system at the St. Louis post-office: Electric Conduit Co., St. Paul, Minn., $17,398; F. E. Newberry Electric Co., St. Louis, $15,588; Guarantee Electric Co., St. Louis, $20,859; Sanborn Electric Co., Indianapolis, Ind., $15,660; G. A. Kees Domestic Engineering Co., St. Paul, $17,550; Van Nort Bros. Electric Co., St. Louis, $18,960.

HOUSTON, TEX.—The Houston Light, Heat & Power Co., through its engineers, Ford, Bacon & Davis, has awarded contract to the ALLIS-CHALMERS CO., of Milwaukee, Wis., for one 3,000-KW., 2,300-volt, 60-cycle, 3-phase, 1,800-r. p. m., steam turbo-generator set. The equipment will be installed during the summer.

LAS VEGAS, N. MEX.—Bids will be asked soon by the Rio La Casa Power Co. for the construction of its proposed power plant. Estimated cost, about $100,000. W. G. Benjamin is Secy.; John L. Zimmerman, of East Las Vegas, is Consulting Engr.

SAN FRANCISCO, CAL.—The San Francisco Gas & Electric Co. has awarded contract to R. D. WOOD & CO., 400 Chestnut St., Philadelphia, Pa., for a 5,000,000-cu. ft. gas holder, to be erected in the Petrero, adjoining the present gas plant there.

ALAMEDA, CAL.—The following bids have been received for installing a boiler in the electric light plant: Charles C. Moore & Co., $10,835; United Iron Works, $7,540; Risden Iron Works, $9,500.

REDONDO BEACH, CAL.—The Pacific Light & Power Co. has awarded a contract to the G. W. PRICE PUMP ENGINE CO. for furnishing and erecting three 30-in. double-suction centrifugal pumps and couplings for direct connection to steam engines here, at $8,380.

REDONDO BEACH, CAL.—The Pacific Light & Power Co. has awarded contract to WESTERN PIPE & STEEL CO., 1758 Downey Ave., Los Angeles, for the erection of three steel circulating water syphon pipes at $47,849.

BAKERSFIELD, CAL.—Bids will be received by the Clerk of the Board of Supervisors until 10 a. m., July 12, for the sale of a franchise to erect poles and string wires for transmitting electric heat and power and for transmitting electric current for heat, light and power and other useful purposes which was applied for by the Mount Whitney Power & Electric Co. I. L. Miller is Clk.

SALT LAKE CITY, UTAH.—Announcement is officially made by William H. Bancroft, Pres., that contracts have been let to WESTINGHOUSE, CHURCH, KERR & CO., 10 Bridge St., New York, for the 11,000-HP. reserve station for the Utah Light & Ry. Co. It will be located on the Jordan River, near the company's present transformer station and steam plant, and work is already under way on the preliminaries. The cost is not made public, but it will be between $600,000 and $750,000. The plant will be installed for the purpose of providing an absolutely continuous supply of electricity for lighting, power and street railway operations in Salt Lake City and Ogden.

WINNIPEG, MAN.—Bids are asked until 11 a. m., July 4, by M. Peterson, Secy. Bd. of Control, for supply and erection of two sets of line disconnecting switches mechanism, Hydroelectric Power Development for City of Winnipeg.

CALGARY, ALTA.—Bids will be received by the City Council until July 12 for a HP. engine, 300 r. p. m., with condenser also a 600-KW., d.c. 600-volt generator switchboard, etc., erected complete at Calgary. H. E. Gillis is City Clk.

BRIDGES.

(denotes that this work is advertised in Engineering News.)*

SOLON, ME.—Bids will be received until July 23 by the Solon Bridge Committee, the Carratunk House, Solon, G. D. Perkins, Chn., for furnishing material and constructing the superstructure of a steel highway bridge over the Kennebec River, between the towns of Solon and Embden. Length of bridge, about 480 ft.

GREENFIELD, MASS.—Contract for construction of a new concrete bridge over the Green River, for which the town recently appropriated $18,000, has been awarded to DANIEL O'CONNELL'S SONS, of Holyoke. The new bridge replaces the bridge that was burned some weeks ago. It will be constructed of concrete, reinforced with steel. Bids were opened on June 23.

ALBANY, N. Y.—See "Barge Canal" item under Miscellaneous Contracts.

INDIANA, PA.—The Board of County Commissioners, Indiana, will receive bids until July 7 for constructing two bridges, one over Bear Run in Banks Township, a reinforced concrete highway bridge, 42 ft. in length and 12 ft. in width, and one over the north branch of Little Mahoning Creek in Canoe Township, a steel bridge with a concrete floor, 40 ft. clear span, 12-ft. roadway.

EBENSBURG, PA.—Bids are asked until 1 p. m., July 5, by the Cambria County Commissioners for the construction of a concrete bridge across Bear Rock Run in Lilly Borough, and also a bridge across Beaver Dam Creek in Chest Township. C. E. Troxell is Clk.

*HUMMELSTOWN, PA.—Bids will be received until 2 p. m., July 12, by the Board of Commissioners of Public Grounds and Buildings of the Commonwealth of Pennsylvania, at Harrisburg, for furnishing all labor and material necessary in the construction of a 5-span non-reinforced concrete arch bridge over Swatara Creek, near Hummelstown, Dauphin County. The length of the bridge over all will be 311 ft.; the width of roadway 20 ft., paved with brick. Samuel B. Rambo is Supt. Plans and specifications are on file at the office of Engineering News, New York.

SOMERSET, PA.—Bids are asked until 2 p. m., July 20, by the County Commissioners for four new county bridges.

PITTSBURG, PA.—Bids for the construction of the three river piers of the North Side Point bridge across the Allegheny River, about 16,000 cu. yds. of stone and concrete masonry required, were opened on June 27 by Col. N. S. Sprague is Supt. Bureau of Construction.

The lowest bidder on the masonry and substructure, it is reported, was Lewis & Wood, Chicago, at $183,000. The Pneumatic Caisson Co., at $232,000, was the next lowest bidder.

ROANOKE, VA.—The ROANOKE BRIDGE CO., of Roanoke, has been awarded contract by Allegheny County for the erection of 13 steel bridges in the county.

*GREENVILLE, S. C.—Bids will be received by the Greenville Paving and Sewer Commission, until 4 p. m., July 20, for constructing a reinforced-concrete bridge. H. S. Jaudon Engineering Co., Engrs., Savannah, Ga.

MADISON, GA.—The ROANOKE BRIDGE CO., Roanoke, Va., has been awarded contract, at $3,700, for the construction of a steel bridge over Hard Labor Creek. Bids were opened on June 9.

WEST PALM BEACH, FLA.—Bids are asked by Palm Beach County until July 5 for constructing a bridge across drainage canal at Boynton.

ROCKPORT, MISS.—The Board of Supervisors, at Hazlehurst, is stated to have awarded a contract to E. P. ALLBURY & SON, of New Orleans, for the construction of a steel bridge over Pearl River here, at $11,-975.

LOUISVILLE, KY.—We are officially advised that the FOSTER-CREIGHTON-GOULD CO., Nashville, Tenn., has been awarded contract for the substructure of bridge to be built across the Ohio River at Louisville by the Kentucky & Indiana Bridge & R. R. Co. The work consists of eight piers, six of which will be in the river and will require approximately 25,000 cu. yds. of concrete.

CINCINNATI, OHIO.—Contract for constructing a concrete bridge over the C. L. & N. R. R. tracks at Whittier St. has been awarded to the KIRCHNER CONSTRUCTION CO., Eighth and Plum Sts., at $6,052. Bids were opened on June 7.

MT. GILEAD, OHIO.—Bids are asked until 11 a. m., July 7, by Clifton Sipe, County Audr., for the necessary labor and material for the construction of a steel bridge to be known as the Watson bridge in Peru Township.

HARTWELL, OHIO.—F. J. P. BROCKETT has been awarded contract by the County Commissioners for the construction of a tile bridge over the canal at Section Ave., Hartwell, at $9,327.

DAYTON, OHIO.—The Board of Control has awarded contract to GEPHART & KLINE, of Dayton, for the construction of the Stewart St. bridge, at $154,520. List of bidders noted on June 2.

RICHMOND, IND.—The Board of County Commissioners, Richmond, will receive bids until July 5 for constructing a concrete arch bridge and fills in Clay Township, known as the Cook bridge; a steel span bridge and fills, known as the White bridge, in Franklin Township, and a concrete pier bridge, known as the Thompson bridge, in Boston Town-

shire also construction of two concrete culverts and repairing two bridges. Demas S. Cook is County Audr.

CROWN POINT, IND.—Bids are asked until noon July 5, by the County Commissioners, for the construction of a bridge in Ross Township. C. A. Johnson is Audr. Lake County.

ALBION, IND.—Bids are asked until 2 p. m., July 5, by the Board of County Commissioners for the construction and repair of bridges, culverts and abutments. John W. Ellis is Audr. Noble County.

LAPORTE, IND.—Bids are asked until 2 p. m., July 6, by the County Commissioners for the repair of Eel River bridge in the town of Mexico.

MARTINSVILLE, IND.—Bids are asked until 2 p. m., July 5, by the County Commissioners, for the construction of a bridge in Green Township. B. E. Thornburgh is Audr. Morgan County.

GREENFIELD, IND.—Bids are asked until 10 a. m., July 5, by the Board of County Commissioners for the construction of three concrete and steel bridges in Brandywine Township and one in Sugar Creek Township. C. H. Troy is Audr. Hancock County.

SCOTTSBURG, IND.—We are officially advised that contract has been awarded to the VINCENNES BRIDGE CO., of Vincennes, Ind., for the construction of an iron bridge over White Oak Creek.

LEBANON, IND.—Bids are asked by the County Commissioners, until 11 a. m., July 8, for the construction of seven bridges.

FRANKFORT, IND.—Bids are asked by the Commissioners of Clinton County, until 2 p. m. July 6, for the construction of 20 bridges.

BLUFFTON, IND.—Bids are asked until 2 p. m., July 8, by the Commissioners of Wells County for the construction of seven bridges.

OTTAWA, ILL.—John DEVERE, of Kankakee, has been awarded contract, at about $15,000, for concrete approaches to the new bridge over the Illinois River here.

FORT BENTON, MONT.—Bids are asked until 2 p. m., July 11, by W. R. Leet, County Clk., for the construction of a combination or steel bridge across Milk River at North Fork, structure to be 200 ft. long and 18 ft. wide, and for other bridges.

*ST. LOUIS, MO.—We are officially advised that the WILLIAM P. CARMICHAEL CO., Fullerton Bldg., St. Louis, was awarded contract on June 22, for the Kingshighway viaduct. The structure will be wholly of reinforced concrete 90 ft. wide and 1,850 ft. long, consisting of one 170-ft., two 140-ft., twelve 25-ft. concrete arches and the remainder of reinforced-concrete retaining walls. It will cross what is known as the "Mill Creek Valley," the main arches being over seven tracks of the Frisco and five tracks of the Missouri Pacific Ry. The contract price is, estimated from unit price bids, about $336,000. Bids were opened on June 21 by the Board of Public Improvements.

SEATTLE, WASH.—The Oregon & Washington Ry. Co., Central Bldg., has awarded contract for the concrete viaduct and retaining wall on Fifth Ave. South and aJckson St. to GRANT, SMITH & CO., Second Ave. and Blanchard St., on a percentage basis. Estimated cost, $125,000.

WENATCHEE, WASH.—Contract for the erection of the bridge across Wenatchee Lake has been let to J. W. CUIGG, at $10,493.

SPOKANE, WASH.—Bids will be received by the County Commissioners until July 1 for the construction of a combination span bridge over Latah Creek on the Darknell Road.

TOPPENISH, WASH.—The County Commissioners have let contract to the SMITH CONTRACTING CO. for a new bridge at Toppenish, at $10,000.

COLFAX, WASH.—O. H. STRATTON, Pullman, has received contract, at $6,730, for the construction of the Pullman bridge, 80 ft. in length; A. VOLK, at $7,900, for the construction of the South Colfax bridge, 114 ft. in length, and at $3,200, for the construction of the Rock Lake bridge, 137 ft. in length.

PORTLAND, ORE.—Contract for constructing two large caissons has been let to JOSEPH SUPPLE, of Portland, for use in building the piers for the new Oregon R. R. & Navigation Company's bridge across the Willamette River just south of the present steel bridge. The caissons will each be 70 ft. long and will be constructed of 12 × 12 in. timbers. It is expected that it will require about six weeks to complete them.

VISALIA, CAL.—Bids will be received until July 12 by the City Clerk for constructing a reinforcer-concrete conduit and bridges. Estimated cost, $80,000. M. L. Weaver is City Engr.

SAN RAFAEL, CAL.—Bids will be received by Robert E. Graham, Clk. Bd. Supervisors of Marin County, until 2 p. m., July 7, for the construction of one lift-span and three stationary span bridge and approaches to be constructed at the crossing of the Tidal Channel on the county road leading from Tiburon to Belvedere, Marin County, for the removal of the present bridge and for the removal of a certain part of the present road embankment.

POCATELLO, IDAHO.—Bids are asked until July 17, by the Board of County Commissioners for the construction of a new steel bridge across Bear River at Soda Springs to replace the present wooden structure.

MONTREAL, QUE.—We are officially advised that the FOUNDATION CO., 115 Broadway, New York, has been awarded contract for the reconstruction of the Victoria bridge over the St. Lawrence River at Montreal for the Canadian Pacific Ry. Co. When completed the bridge will be double-tracked, resting upon nine piers, some of which probably will be pneumatic caissons.

QUEBEC, QUE.—Bids are asked until noon, Sept. 1, by L. K. Jones, Secy. Dept. Railways and Canals, Ottawa, Ont., for Quebec bridge superstructure. Plans and specifications may be seen and forms of proposal obtained on and after July 1 at the office of the Quebec Bridge Board of Engineers, Canadian Express Bldg., Montreal, and at the Department of Railways and Canals, Ottawa.

OTTAWA, ONT.—Bids are asked by L. K. Jones, Secy. Dept. Railways and Canals, until noon, July 4, for the construction of and erection of the superstructure of the bridge over the Saskatchewan River on the line of the Hudson Bay Ry. The bridge will be composed of a swing span of 262 ft. and four fixed beams of 147 ft. each.

BUILDINGS.

(denotes that this work is advertised in Engineering News.)*

BROOKLINE, MASS.—Plans for a grammar school to be erected on Westbourne Terrace, Brookline, at a cost of $75,000, have been presented to the Schoolhouse Committee, Franklin W. Hobbs, Chn. Kilham & Hopkins, 9 Park St., Boston, are Archs., and the plans as drawn by them are for an 8-room, flat-roof primary building. It is planned to have each of the rooms large enough to accommodate 40 pupils if necessary. The new school is to be a 2-story building, built of red brick. The stair cases which are to lead to exits are to be of iron. Repairs will be made this summer on the Devotion and Pierce grammar schools, making the total outlay $117,000.

NEW HAVEN, CONN.—Bids will be received by G. T. Hewlett, Secy. Bd. of Education, until noon, July 2, for the constructions of additions to Edwards and Hallock Sts. schools and remodeling the Oak St. school.

MANCHESTER, CONN.—The Ninth School District has voted an appropriation of approximately $40,000 for the construction of a building at the Center. The preliminary plans contemplate an 8-room building. Frank Cheney, Jr., is Chn. of the Bldg. Com.

NEW YORK, N. Y.—Bids are asked by the Board of Health until 10 a. m., July 8, for furnishing all the necessary labor and materials required to install steam heating apparatus in certain buildings at the Tuberculosis Sanatorium at Otisville, Orange County, New York, for the Department of Health of the city of New York. Dr. Ernst J. Lederle is Pres.

The Open Stair Tenement Co., 20 Broad St., will erect model tenements at 77th St. and East River. The buildings will have suites of two, three and four rooms, each with bath. Henry Atterbury Smith, 1181 Broadway, is Arch. for the buildings; Clark, MacMullen & Riley, 20 Broad St., are Engrs. The buildings will be started at once, and 100 ft. finished in six months, the next 100 ft. in about three months afterward, and so on. The buildings will be built of light brick. The roofs will be tiled and utilized by the tenants for recreation. The stairs will be cast iron, with marble treads, to aid in the light producing qualities. Each suite will have a small vestibule off the open stairs from which will be available the bathroom, the refrigerator space and the kitchen or living rooms and the bedrooms. The kitchens will be fitted with space saving devices to make the room available for family uses other than cooking.

Plans have been filed for a 12-story brick apartment hotel, to be erected at 308 West 82d St., for the Waters Gatling Improvement Co., John R. Waters, Pres., at a cost of $85,000. The building will have a frontage of 25 ft., with a depth of 80.6 ft., with a facade of brick with trimmings of limestone and terra cotta.

Plans have been filed for the George Ehret Automobile Industry Building, which will be two stories high and located on the east side of Broadway, Columbus Circle, 58th St. to 59th St. John R. Hinchman and Walker & Hazzard, 437 Fifth Ave., are Archs. The cost is placed at $120,000.

NEW YORK, N. Y.—Bids are asked until 10.30 p. m., July 7, by R. Waldo, Fire Comr., for furnishing all the labor and materials required for repairs and replacements to the quarters of Engine Company 136, located on the south side of Liberty Ave., 40 ft. west of Euclid Ave., Boro. of Brooklyn.

A 12-story building is to be built by June C. McGuire & Co., from plans by Ernest Green, 3 Beekman St., at 515 Park Ave., at the southeast corner of 60th St. The structure will be finished on Oct. 1. It will be of cut stone and terra cotta brick, and fireproof. The building and land will cost $750,000. Pease & Elliman are the agents.

Plans have been filed with the Building Superintendent for a 12-story brick store and loft on the south side of 26th St., 393.9 ft. west of Sixth Ave., for the Eagle Improvement Co., Morris Mayers, Pres. The building will have a frontage of 81.3 ft. and a depth of 88 ft., with an extension, and will be fireproof. The facade will be of brick, with trimmings of limestone and terra cotta. Buchman & Fox, 11 East 59th St., are Archs. Cost, $300,000.

The Fackmer-Coates Construction Co. has purchased, through S. B. Goodale & Son, 12 West 27th St., three old-fashioned dwellings, on a plot 60 × 89.9 ft., on 36th St., 195 ft. east of Sixth Ave. A 12-story loft structure will be erected on the property. It will contain three elevators, two of which will be for passengers and one for freight. The facade will be of limestone and terra cotta, with marble base. The arrangement of the lofts is such that they can be rented as a whole or subdivided.

NEW YORK, N. Y.—We are officially advised that EDWARD MARGOLIES, 44 West 34th St., has been awarded the contract for the construction of the music hall to be built by the Shuberts on the American Horse Exchange site at Broadway and 50th St. It will be finished in 4½ months after the work has begun and will cost about $100,000. The plans are by William A. Swasey, Arch., 47 West 34th St. The music hall will cover an area of 175 × 90 ft. The parquet floor will seat 1,200, and there will be additional seats to accommodate 400 in the balcony. The main entrance will be in Broadway, and there will be ten exits in Seventh Ave. A lobby, 20 × 50 ft., will be near the Broadway entrance. This will have marble floor and plastered ceiling. Adjoining this will be a smoking room 30 × 35 ft. On the Broadway front of the balcony will be a foyer 25 × 75 ft. There will be balconies over the sidewalk and large openings in the rear overlooking the stage. The auditorium will be finished with a trellis, on which vines will be interwoven. The structure will be fireproof. The cafe and restaurant will occupy part of the Broadway front and all of the 50th St. frontage. The interior will be treated in the Flemish style. On the Broadway corner there will be a room 50 × 75 ft., which will be carried up two stories and treated as a courtyard of an old Holland inn, with balconies overlooking the court. The main dining room will open into this courtyard. It will be panelled to the ceiling in old Flemish oak, and the floor will be covered with red tiles. On top of the building there will be a roof garden.

The following bids were received on June 22 by the Department of Public Charities for providing all the labor and materials required for the interior finishing, cold storage refrigerating plant, sterilizing plant, lighting fixtures, for the extension of two Tuberculosis Infirmaries, Metropolitan Hospital District, Blackwell's Island: Charles Willie, Jr., $49,777; Cowden & De Young, $44,400; Thomas B. Lahy, $47,973; Grant Rohrer, $48,320; William Horne Co., $52,400; Bottsford-Dickinson, 1171 Broadway, $43,852.

NEW YORK, N. Y.—The following bids were received on June 27 by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, for the general construction, etc., of additions to and alterations in Boys' High School on westerly side of Marcy Ave., between Madison St. and Putnam Ave., Boro. of Brooklyn: George F. Driscoll, 548 Union St., Brooklyn, $379,883; A. L. Guerone & Co., 162 East 23d St., New York, $404,350; Geo. Hilderbrand, 38 Park Row, New York, $437,698; C. H. Peckworth, 415 Hudson St., New York, $394,799; T. A. Clark Co., 850 Monroe St., Brooklyn, $407,000; Thomas McKeown, 103 Park Ave., New York $397,437; James MacArthur, 22 Ormonde Pl., Brooklyn, $436,156; H. C. Stowe Const. Co., 221 Greenpoint Ave., Brooklyn, $398,500; Richard E. Heningham, 1 Madison Ave., New York, $398,485; George Vassars Sons Co., 1170 Broadway, New York, $436,097; John F. Walsh Construction Co., 1 Madison Ave., New York, $394,700; P. J. Brennan & Son, 624 Madison Ave., New York, $424,900.

NEW YORK, N. Y.—Bids are asked until 3 p. m., July 11, by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, (1) for metal ceilings painting, etc., at Public Schools No. 2, 10, 29, 32, 39, 40, 58, 60, 77, 102 and 118, Boro. of Brooklyn; (2) for furnishing and erecting one portable school house on the premises of Public School No. 14, Eastern Boulevard, Throggs Neck, Boro. of The Bronx; (3) alterations and repairs to heating and ventilating apparatus in Public Schools Nos. 1, 2, 10, 13, 21, 53, 64, 103, 119, 147, 171, 184, and in Stuyvesant High School and Wadleigh High School, Boro. of Manhattan; (4) for the general construction, etc., of portable school building, northeast corner of Seminole Ave. and Euclid St., Forest Hills, Boro. of Queens; (5) for the general construction of addition to and alterations in Public School No. 7, on southerly side of Van Alst Ave., about 100 ft. east of Flushing Ave., Astoria, Boro. of Queens; (6) for alterations, repairs, etc., at old Public School No. 16, used as an annex to Public School No. 17, Sycamore Ave. and Lake St., Corona, Boro. of Queens; (7) for item 1, installing heating and ventilating apparatus, and item 2, installing temperature regulation in New Public School No. 77, on the southerly side of Covert Ave., between Centre and George Sts., Ridgewood Park, Boro. of Queens; (8) for the general construction, etc., of portable building at Public School No. 17, on the westerly side of Linden St., about 340 ft. south of Prospect Ave., New Brighton, Boro. of Richmond.

ALBANY, N. Y.—COLLINS BROS., Bensen Bldg., Albany, N. Y., have secured a contract for the construction of a warehouse for the International Harvester Co. at Broadway and North Pearl and Tivoli Sts., in this city. The building will have a frontage of 90 ft. and a depth of 150 ft. The front of the building on Broadway will be of Indiana limestone, while the facade on North Pearl and Tivoli Sts. will be of red pressed brick with Indiana limestone trimmings. The structure will be equipped with elevators. The cost is said to be $55,000. The building must be ready for occupancy by Jan. 1, 1911.

COMSTOCK, N. Y.—The bids received by C. V. Collins, Supt. of State Prisons, on June 22, for the construction of the north wing of the cell house, including, heating and electric work, at the Great Meadow Prison at Comstock, N. Y., were: Hudson Valley Construction Co., of Troy, N. Y., $123,980; A. E. Stephens Co., of Binghamton and New York, $128,300; Morris Kantrowitz, of Albany, N. Y., $131,000. F. B. Ware is State Arch.

SHAMOKIN, PA.—James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., has awarded contract for the construction of a post-office at Shamokin, Pa., to CHARLES H. PECKWORTH, 415 Hudson St., New York, at $68,878. Time, Aug. 1, 1910.

PHILADELPHIA, PA.—FREDERICK A. HAVENS & CO., Perry Bldg., have contracts for twelve 3-story houses to be built in Queen Lane Manor, Germantown, for the Queen Lane Manor Co., at a cost of about $150,000.

A permit has been obtained by ROYDHOUSE, AREY & CO., Fidelity Bldg., for a 10-story commercial building, 73 × 100 ft., at the southeast corner of Broad and Spring Garden Sts., for the estate of Henry C. Lea. The contract price is $205,000. Watson & Huckel are Archs., 1211 Walnut St.

UNIONTOWN, PA.—The contract has been let to the SOUTH PENN BUILDING CO., of Uniontown, for constructing a high school building.

BALTIMORE, MD.—The committee appointed by the Board of Directors of the Baltimore Trust Co. to devise means for increasing the present inadequate accommodations afforded the working force of the company, has recommended that an addition to the present structure be erected on the lot owned by the company immediately in the rear of the banking building and facing on German St. The directors have sanctioned the proposition, and plans for the new building are now being prepared by the architects. It is expected to award the contract for the structure by July 9. The addition will be closely copied, as to exterior design, after the present structure, and will be of the same general dimensions. The difference in grade between Baltimore St. and German St. at this point will permit of there being a semi-basement under the first floor of the extension on German St., though the first-floor level of the present building will be maintained clear through the new building to the latter street, and most of the working force of the company and the offices of the officials will be located on this main floor. It is estimated that the addition will cost about $125,000 and that it will be ready for occupancy before next winter.

*FORT MONROE, VA.—Bids are asked by Capt. Ernest R. Tilton, Constr. Q. M., until 10 a. m., July 18, for construction of an addition to Post Hospital at Fort Monroe, Va., including plumbing, heating and electrical wiring and fixtures.

GRAFTON, W. VA.—The Baltimore & Ohio R. R. Co. has awarded to J. J. WALSH & SON, 1533 Maryland Ave., Baltimore, Md., the contract to erect a passenger station at Grafton. M. A. Long is Arch.

GREENVILLE, N. C.—Bids are asked until July 11 by the County Commissioners for the erection and completion of a courthouse and jail from plans and specifications prepared by Milburn, Heister & Co., Home Life Bldg., Washington, D. C.

AIKEN, S. C.—Bids were received as follows on June 25, by James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., for the construction of a post-office building at Aiken, S. C.: King Lumber Co., Charlottesville, Va., $51,970; George A. Clayton, Atlanta, Ga., $48,884; Palmer Contracting Co., Augusta, Ga., $48,650; Ambrose B. Stannard, St. James Bldg., New York, $45,618.

MOBILE, ALA.—See item under Miscellaneous Contracts.—"Depot, Pier, Etc.," Mobile, Ala.

AKRON, OHIO.—The Directors of the Portage Hotel Co. have awarded the contract for the steel structural work on the proposed hotel to GEORGE B. LONG, of Lexington, Ky., at $247,000. The hotel is to cost over $500,000. The Directors are: C. B. Raymond, M. O'Neil, Isaac Harter, A. H. Marks, W. B. Miller, O. C. Barber and F. A. Dudley.

DELAWARE, OHIO.—Plans have been completed by Marriott & Allen, Clinton Bank Bldg., Columbus, for a high school building. Bids will be opened for the construction of the building about July 5.

COLUMBUS, OHIO.—J. S. Goldsmith, Arch., Wyandotte Block, has been commissioned to prepare plans and specifications for a business block to be erected at Grubb and West Broad Sts. by J. W. Meek. Bids will be invited soon.

CLEVELAND, OHIO.—Plans have been completed for suburban passenger station to be built by the New York, Chicago & St. Louis R. R. Co. at a cost of approximately $200,000 at the Euclid Ave. crossing in Lake View. It is expected that contracts will be let and work begin late in the summer. The station is a part of the grade crossing elimination plan through East Cleveland. The station will be two stories in height and will have a frontage on Euclid Ave. of 135 ft. It will be built of pressed brick, light gray in color, with light artificial stone pilasters and window lintels. The entrance to the station will be from the center of the lower floor, the second floor being on the track level. Store rooms will take up the lower floor space. Broad steps will lead to the second floor. At the east end of the building a broad driveway will lead into a large octagonal court on a level with the upper floors, for the accommodation of vehicles in general. Along the second floor fronting Euclid Ave. will be a stone balcony furnishing a promenade. Along the main tracks is to be an umbrella shed, or platform, 700 ft. in length, reached from the main depot by a canopied passageway. The interior finish and decoration of both waiting rooms and offices will be of white tile with tile floors and ceilings of ornamental iron work. The building will have its own heating plant and will be electrically lighted throughout. A. J. Himes is Engr. of Grade Elimination, Cleveland.

Bids will be received at the office of the Clerk of the Board of Education, East Sixth St., Cleveland, Ohio, until noon, July 18, for furnishing all the materials and for doing all the work necessary to complete the school building on the property owned by the Board of Education on the Glenville High School lot and to be known as Glenville High School Annex. Charles Orr is Dir. of Schools.

*CINCINNATI, OHIO.—Bids are asked until 2 p. m., July 27, by Lt. Col. J. G. Warren, Corps Engrs., U. S. A., for constructing four lock-tenders' dwellings at Dam No. 37, Ohio River.

TOLEDO, OHIO.—All bids received for the erection of the new high schools are above the estimates and there is a possibility of the contracts not being awarded at present, according to the Toledo "Blade." Bids for the erection of the Jessup W. Scott school at Collingwood and Ashland Aves. and the Morrison R. Waite school, on the East Side, were opened by the Board of Education on June 20. The following bids were received for the completion of the buildings: Jessup W. Scott school—A. Bentley & Son, $381,434; Henry J. Spieker & Co., $377,399; John Pioch, $343,882; William J. Spear, $375,000. Morrison R. Waite school—A. Bentley &

Son, $379,864; Henry J. Spieker & Co., $381,763; M. Rabbitt & Sons, $369,993. David L. Stine, The Valentine, Toledo, is Arch.

CRAWFORDSVILLE, IND.—The School Board will receive bids until 2 p. m., July 14, for the construction of an addition to the present Central School building. Patton & Miller, 140 Dearborn St., Chicago, Ill., are Archs. Separate bids will be received on each part of construction. T. T. Munhall is Pres.

FORT WAYNE, IND.—Bids are asked by Louis Roy, Trustee, until noon, July 11, for the construction of a school building in District No. 6, Jackson Township.

BROWNSTOWN, IND.—The Commissioners of Jackson County have let a contract for remodeling the court-house to HEINTZMAN BROS., of La Fayette, Ind., for $65,000; and for the heating to LANE, PYKE & CO., of La Fayette, at $936.

INDIANAPOLIS, IND.—Bids are asked by John E. Cleland, Business Dir. School Bd., until 8 p. m., July 12, for remodeling and enlarging the Manual Training School building.

Bids are asked by the Commission for the Indiana State School for the Deaf, Room 54, State House., until July 13, for the construction of a barn and the construction of a large amount of cement walks and gravel roadways. Rubush & Hunter, American Central Life Bldg., are Archs.

INDIANAPOLIS, IND.—The Trustees of the Indianapolis Lodge, Order of Elks, is preparing to ask for bids for the erection of a building to cost $150,000. The structure will be brick and stone, colonial style, with wide porches and massive columns.

Bids are asked by the School Board, John E. Cleland, Business Dir., until July 5 for the erection of a school building at Capital Ave. and 43d St., estimated to cost $70,000; an addition to School No. 60, estimated to cost $40,000, and an addition to School No. 28, to cost $10,000.

The Advisory Committee of the Public Library is preparing to ask for bids for the construction of two branch library buildings, one near Spades Park and one at the corner of Prospect and Madison Aves.

NEWCASTLE, IND.—All bids for the construction of three buildings at the Village of Epileptics have been rejected by the Trustees. The bids exceeded the appropriation of $75,000. New bids will be asked for at once. Foltz & Parker, Pythian Bldg., Indianapolis, are Archs.

GARY, IND.—NATHAN & LOUIS SALLINGER, of Goshen, Ind., have been awarded a contract to build a business block in Gary.

Klaw & Erlanger, of New York, have purchased a site on Fifth and Walnut Sts. on which to erect a theater building. Bids will be asked for the construction soon.

BROOKVILLE, IND.—Bids are asked by the Commissioners of Franklin County until 1 p. m., July 21, for remodeling and improving court-house. Charles A. Miller is Audr.

PERU, IND.—Bids are asked by the Commissioners of Miami County until 2 p. m., July 26, for cabinet work for the new court-house. Charles Griswold is Audr.

*LITCHFIELD, ILL.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Aug. 3, for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. post-office at Litchfield, Ill.

COLUMBUS, WIS.—EDWARD DONEHOE, of Janesville, Wis., has been awarded the contract for the proposed high school to be erected here. It will be three stories, 78 × 134 ft., of brick with Bedford stone trim, with tile partitions, deadened floors and walls, outer walls lined with hollow tile. Work is to be completed by July 1, 1911. Cost, approximately $50,000.

MILWAUKEE, WIS.—The Roundy-Peckham & Dexter Co. has taken out a permit for the construction of a warehouse at 247 Broadway. Howland Russell, 106 Mason St., is Arch. The building will be six stories high, 40 × 120 ft., of reinforced concrete faced with brick, with an ornamental front. Cost, $45,000.

JANESVILLE, WIS.—WILLIAM J. FITZGERALD, of Beloit, Wis., has been awarded the contract for the erection of the proposed warehouse building for the Janesville Machine Co. Cost, $45,000.

KENOSHA, WIS.—Bids are being received by the Committee on Buildings and Grounds of the City Council for the erection of a new city hall building and remodeling the engine house adjoining. The city hall is estimated to cost $45,000 and remodeling the engine house, $2,500. The building will be constructed of brick, with fireproof interior walls, ornamental stone trim. Joseph Lindl is Arch., Kenosha.

LOGAN, IOWA.—The SCHMIDT CUT STONE CO., South Bend, Ind., has been awarded the contract for the cut stone work on the Harrison County court-house, to be built at Logan, Iowa. The building will cost $100,000 and Indiana Bedford stone will be used in construction.

MINNEAPOLIS, MINN.—Bids were received as follows on June 27, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office at Minneapolis Minn.: John Gill & Son, 12 West 31st St., New York, $455,400; Charles W. Peckworth, 415 Hudson St., New York, $472,392; William H. Fissell & Co., 1133 Broadway, New York, $469,000; Wells Bros. Co., Chicago $485,700; Oscawana Building Co., 200 Fifth Ave., New York, $467,000; William H. Maxwell, Tacoma, Wash., $435,650; J. H. Wiese, South Omaha, Neb., $448,580; Conners Bros. Co., Lowell, Mass., $465,200; General Construction Co., Milwaukee, Wis., $469,562; M. P. Wells, Witherspoon Bldg., Philadelphia, $414,619; Charles McCaul Co., Tenth and Sansom Sts., Philadelphia, $425,668; Richard E. Heningham, 1 Madison Ave., New York, $438,293.

ST. PAUL, MINN.—Bids are asked by the City and County Board of Control, N. P. Langford, Chn., until noon, July 11, for the completion of the foundation and the erection of the 3-story pressed brick and cut stone, fireproof service and maintenance building at the City and County Hospital. C. H. Johnston, Manhattan Bldg., is Arch. Cost, $130,000.

PLATTSMOUTH, NEB.—Bids were received as follows on June 28, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post-office at Plattsmouth, Neb.: General Construction Co., Milwaukee, Wis, $52,500; L. G. Larson, Plattsmouth, Neb., $53,353; J. H. Wiese, South Omaha, Neb., $52,370.

CLINTON, MO.—Bids were received as follows on June 23 by James Knox Taylor, Supervy. Arch. of the Treasury Dept., Washington, D. C., for the construction of a post-office building at Clinton, Mo.: Hiram Lloyd Building & Construction Co., Odd Fellows' Bldg., St. Louis, $71,777; King Lumber Co., Charlottesville, Va., $64,445; Latimer & Benning, Kansas City, Mo., $74,900.

MAGNOLIA, ARK.—The STEWART-McGEHEE CONSTRUCTION CO., of Little Rock, Ark., was awarded the contract on June 17 for the construction of the buildings for the agricultural schools to be established by the State at Magnolia, in the Third District, and Monticello, in the Fourth District. Each contract calls for a main building 60 × 120 ft., with two dormitories and a kitchen and dining room. The main buildings are to be 3-story brick structures. The contract for the Magnolia school was let on a bid of $45,800, and the Monticello building for $44,800. Both buildings will be ready for occupancy Dec. 1.

LOS ANGELES, CAL.—Bids are asked by Hudson & Munsell, Archs., Stimson Bldg., until July 25, for the construction of a detention home to be erected by the County Board of Supervisors at Yale and College Sts. and to be a brick structure 201 × 165 ft. enclosing an open court 135 × 98 ft., with one and two stories, concrete foundation, hard brick walls, stone trim, slate roof, skylights, steel beams and cast-iron columns, hollow tile partitions, metal lath, 2-pipe vacuum steam heating. Cost, $60,000.

F. M. Tyler, Union Trust Bldg., is preparing plans for a 4-story brick, loft building to be erected on East Third St. for the McStoy Supply Co., and to be leased to the N. O. Nelson Mfg. Co., of St. Louis, Mo. It will be of red pressed brick, heavy mill construction, elevators, etc.

The RICHARDS-NEUSTADT CO., Wright & Callender Bldg., have secured the contract for the erection of an 8-story, reinforced concrete loft building to be erected for the California Clay Mfg. Co. on Los Angeles St., at a cost of $150,000. Edelman & Barnett are Archs., **Blanchard Bldg.**

SANTA BARBARA, CAL.—The RICHARDS-NEUSTADT CO., Wright & Callender Bldg., Los Angeles, have the contract for constructing two frame and plaster residences at Santa Barbara, Cal., for W. H. Bartlett & Son, of Chicago. Each residence is to contain 14 rooms, and to cost, including private water system, etc., $100,000. F. L. Roehrig is Arch., Byrne Bldg., Los Angeles.

SAN FRANCISCO, CAL.—The contract was let on June 17 by the city for the Franklin School, to be erected in Eight St., between Harrison and Bryant Sts. The contract price was $345,000 and the successful bidder was E. B. PATTERSON.

Excavation has been made for the foundation of a 7-story hotel on the north line of Geary St., 77 ft. west of Mason St., for the St. Francis Realty Co. The lot on which the hotel is to stand is part of the corner property recently bought by San Jose capitalists from the Ford Estate. The hotel will occupy only a part of the lot, with a frontage of 60 ft. and depth of 60 ft. to a street in the rear. The building will contain 70 rooms and 50 baths. The front will be of pressed brick and terra cotta in light colors. There will be electric elevator service, tiled bathrooms, marble entrance and finishings in mahogany and birch. The cost will be $80,000. The plans were drawn by William H. Weeks, Arch., Grant Bldg., and the construction is being done under the direction of Joseph N. Rucker & Co., who made the sale of the land. It is expected that the hotel will be ready for occupancy in about four months.

MARYSVILLE, CAL.—The following bids for the construction of the proposed Elks' temple in this city were opened on June 14 by the Building Committee: Marders & Cobb, Marysville, $50,798; I. C. Evans, Marysville, $45,987; M. C. Couchot, San Francisco, $45,987; C. F. Palm, Marysville, $42,815, $2,584 to be added for an elevator; P. F. Mueller, of San Francisco, $45,007; W. Anderson, San Francisco, $68,534; Williams Brothers & Henderson, of San Francisco, $46,471. The contract was awarded to C. F. PALM, of Marysville.

BAKERSFIELD, CAL.—F. J. AMWEG, 244 Kearney St., San Francisco, has been awarded the contract for building the proposed county court-house. His bid, $340,827, was the lowest of eight. The following bids were submitted: M. W. Anderson & Co., five propositions ranging from $393,913 to $397,500; G. F. Atkinson, Los Angeles, two propositions, $392,383 and $394,398; James Arp, Bakersfield, three propositions, $429,445, $428,000 and $431,766; F. O. Engstein & Co., Los Angeles, six propositions ranging from $347,000 to $358,000; F. J. Amweg, six propositions ranging from $333,308 to $348,335; James Campbell Co., three propositions, ranging from $347,400 to $359,400; Brown & Alcorn, San Francisco, four propositions, ranging from $345,995 to $349,970; C. J. Lindgren, San Francisco, seven propositions, ranging from $345,500 to $356,600.

HANFORD, CAL.—Bids are asked by the County Supervisors of Kings County until July 14 for the construction of a hospital in the fair grounds at Hanford. Francis Cunningham is Clerk, Hanford.

MODESTO, CAL.—Bids are asked by the County Board of Supervisors of Stanislaus County until July 18 for the construction of a county jail at Modesto. B. G. McDougall is Arch., Russ Bldg., San Francisco. Estimated cost, $50,000.

PHOENIX, ARIZ.—The contract for the erection of a 2-story grammar school on West Adams St. has been awarded by the School Trustees to the JOHN ROBERTS CO., Lankershire Bldg., Los Angeles, Cal., at $74,602. Harrison Albright is Arch., Laughlin Bldg., Los Angeles.

SALT LAKE CITY, UTAH.—A. F. Wey, of this city, will receive bids for the erection of a 4-story brick hotel, 100 × 60 ft., to be built on Second South St. It will contain 60 rooms and 40 bath rooms. Cost, $65,000.

OTTAWA, ONT.—We are officially advised that William Doran and R. M. Devlin, of Ottawa, have been awarded the contract for building the new wing to the eastern block of the Departmental Buildings. Their bid, which amounted to $222,800, was the lowest of eight received. The new wing will have a length of 120 ft. and a width of 40 ft., and will consist of three stories and a basement. It will fill in the vacant space between the Privy Council Chamber and the Treasury branch of the Finance Department. The structure will conform, architecturally, with the existing building and will be of Nepean sandstone with trimmings. Each floor will contain 3,500 sq. ft. of space. The departmental architects are working with the specifications for the new block, which is to be erected on Sussex St. at a cost of $4,000,000. It is expected that bids will be called for in a few weeks.

WATER-SUPPLY—IRRIGATION.

(denotes that this work is advertised in Engineering News.)*

SOUTH NORWALK, CONN.—Bids were received on June 16 by the Water Commissioners for laying 1¾ miles of water pipe. Contract was awarded on June 18 to ANTONIO BUCCIAVELLI at 22 cts. per lin. ft. for pipe laying, and $2.80 per cu. rod for rock excavation.

BROOKLYN, N. Y.—Bids are asked by Alfred E. Steers, Boro. Pres., until 11 a. m., July 13, for furnishing all the labor and materials for repairs to boiled and pumphouse, Caisson No. 2, West Twelfth St. and Neptune Ave., Coney Island, in accordance with the plans and specifications.

BROOKLYN, N. Y.—Bids were received as follows on June 22 by the Department of Water Supply, Gas and Electricity for furnishing, delivering and laying high-pressure fire service mains and appurtenances in Livingston and Remsen Sts., and in Elm and Gallatin Place, Boro. of Brooklyn: Haggerty & Drummond, 180 Broadway, $19,807; Newman & Carey, $20,592; Murphy Bros., $22,637; Cranford Co., $21,387; Leo E. Kelley, $20,061.

Bids were also opened as follows for furnishing and delivering c.-i. pipe, special castings and valve sexcastings: Florence Iron Works, 400 Chestnut St., Philadelphia, Pa., $22,533; John Fox & Co., $23,225; U. S. Cast Iron Pipe & Foundry Co., $25,029; W. J. Drummond, $23,787; Standard Cast Iron Pipe & Foundry Co., $23,707.

NEW YORK, N. Y.—Bids are asked until 2 p. m., July 13, by the Department of Water Supply, Gas and Electricity for various supplies for this department. Henry S. Thompson is Comr.

ALBANY, N. Y.—See "Barge Canal" item under Miscellaneous Contracts.

BELFAST, N. Y.—Bids will be received until July 1 by the Water Commissioners of the Water District, Patrick F. Loftis, Pres., for constructing a system of water-works. C. W. Brown, Chapin Block, Buffalo, is Engr.

*PIKE, N. Y.—Bids will be received by the President and Trustees of the Village until 7 p. m., July 11, for the construction of a gravity water supply system. For details see advertisement in this issue. A. M. Thomas is Clk.

SPENCERPORT, N. Y.—We are officially advised that bids were opened on June 21 for water-works here. Contract was let to CHARLES R. LEWIS, Ilion, N. Y., at $32,349. Other bids were Dennison & Co., Rochester, N. Y., $33,745; Republic Engineering & Construction Co., Buffalo, N. Y., $34,771.

LIVONIA, N. Y.—Bids will be received until July 11 by the Board of Water Commissioners, C. H. Gary, Clk., for a pumping plant and its connections with the existing mains, consisting of a concrete and frame pump house, a triplex pump with connected motor, a triplex pump with a connected gasoline engine, and furnishing and laying approximately 400 ft. of 6-in. pipe, together with special castings and gates. N. A. Brown is Engr., Rochester.

NEWBURG, N. Y.—P. P. O'HEHIR, of Warwick, N. Y., has secured contract at $46,153, for raising an earth dam and roadway, building concrete masonry, stone riprap walls and slope paving and other work incidental thereto, consisting of about 4,000 cu. yds. earth excavation, 37,000 cu. yds. of earth embankment, 3,450 cu. yds. puddle wall, 4,250 cu. yds. broken stone lining, 11,000 sq. yds. slope paving, 550 cu. yds. riprap walls, 500 cu. yds. concrete masonry and other work. Bids opened on June 6 by the Board Water Commissioners.

OLEAN, N. Y.—The following bids were received on June 8 by the Board of Water Commissioners for water pipe and lead (a) 18-in., (b) 6-in., (c) flexible, (d) specials: U. S. Cast Iron Pipe & Foundry Co., 71 Broadway, New York, (a) $24.20, (b) 24.80, (d) 2⅝ cts.; R. D. Wood & Co., 400 Chestnut St., Philadelphia, (a) $25.90, (b) $25.90, (c) $36, d) 2½ cts.; John Fox & Co., (a) $26.40, (b) $26.40, (d) 2½ cts.; Massillon Iron Co., (a) $25.80, (b) $26; Charles Miller & Son Co., (a) $25.40, (b) $25.40, (d) 2¼ cts.; Donaldson Iron Co., (a) $26.10, (b) $27, (d) 2½ cts. The contract was awarded to the U. S. CAST IRON PIPE & FOUNDRY CO., for 18-in. [illegible] bell and spigot pipe, and R. D. WO[illegible] CO. for flexible joint pipe.

*ATLANTIC CITY, N. J.—Bids will be received by the Board of Water Commissioners until 2.30 p. m., July 15, for furnishing, installing steam and water pipes, valves and fittings at Absecon pumping station, in accordance with plans and specifications on file in the office of the Water Department. Van Gilder is Engr. and Supt.

WHARTON, N. J.—Bids will be asked about Sept. 15 for constructing the water-works. Estimated cost, $40,000. W. [illegible] is City Clk.

RAHWAY, N. J.—The New Jersey State Reformatory has awarded contract to S. MOORE, of Stockton, for constructing 3 wells at the reformatory, at $3.50 per ft. for 12-in. boring, and $1.50 per ft. for 8-in. boring.

*PITTSBURG, PA.—Bids addressed to the Board of Prison Inspectors of the Western Penitentiary of Pennsylvania, Pittsburg, will be received at the office of John F. [illegible], Warden, until noon, July 14, for the construction of a steel tank of from 125,000 to 150,000 gallons capacity on tower 100 ft. high. For details see advertisement in this issue.

*PITTSBURG, PA.—We are officially advised that bids received by the Board of Inspectors of the Western Penitentiary of Pennsylvania on June 15, for the construction of a steel water storage reservoir of 150,000 to 175,000 gallons capacity have been rejected as excessive. Samuel E. [illegible] is Consulting Engr., 706 Empire Bldg., Pittsburg.

HANCOCK, MD.—See item under Sewerage.

WASHINGTON, D. C.—Bids were received as follows on June 27 by the Commissioners of the District of Columbia, for furnishing water meters in the district: Buffalo Meter Co., Buffalo, N. Y. (American type), $6; Hersey Mfg. Co., New York (Hersey type), $6; Thomson Meter Co., Brooklyn (Lambert type), $7.48; Pittsburg Meter Co., Pittsburg (Keystone type), $7.90, (Keystone type "W"), $5.90; Neptune Meter Co., Brooklyn (Trident type), $8; Union Water Meter Co., Worcester, Mass. (King type), $7.10; Henry R. Worthington, New York (Model "D"), $6.50; National Meter Co., New York (Model SAX Nat.), $8. All meters of the disk design.

CLARKSBURG, W. VA.—We are officially advised that bids were received by the Water-Works and Sewerage Board, Scott G. Highland, Secy., on June 15 for a mechanical filter with appurtenances; also for furnishing and laying c.-i. water pipe, valves and appurtenances, as follows: Contract 1—Engineer's estimate, $100,000; H. C. Brooks Co., Clarksburg, $102,500; Pitt Construction Co., 821 Fulton Bldg., Pittsburg, Pa., $104,760. New York Continental Jewell Filtration Co., 15 Broad St., New York, $104,800; Fred. T. Ley & Co., 29 Broadway, New York, $105,350; Filbert Paving & Construction Co., 903 Penn Bldg., Philadelphia, Pa., $105,837; Sand & Gravel Co., East Liverpool, Ohio, $108,472; Bowman Bros. Co., McKeesport, Pa., $112,395; Stamper, Royland & Co., Richmond, Va., $119,130; Kaps-Brehm Co., Cincinnati, Ohio, $129,916; James Skene & Sons Co., Huntington, W. Va., $92,300 (not including low and high lift pumps and boilers); John W. Danforth, Buffalo, $15,200 (for low and high lift pumps and boilers); Camden Iron Works, Camden, N. J., $7,695 (for low and high lift pumps); Dravo-Doyle Co., Pittsburg, $8,600 (for low and high lift pumps); Platt Iron Works, Dayton, Ohio, $6,557 (for low and high lift pumps); E. Keeler Co., Williamsport, Pa., $7,958 (for boilers); W. B. Osborn, Clarksburg, $8,648 (for boilers). Contract 2—Engineer's estimate, $67,156; John I. Dick, Scottdale, Pa., $58,834; W. M. Chisholm & Son, 331 Fourth Ave., Pittsburg, $59,121; William Bateson & Co., Wheeling, W. Va., $61,718; Cantrell Construction Co., Parkersburg, W. Va., $62,206; Sand & Gravel Co., $62,343; H. C. Brooks Co., $64,929; Thoney Pietro, Morgantown, W. Va., $65,382; Filbert Paving & Construction Co., $66,996; Bowman Bros., $70,686; M. O'Herron & Co., First and McKeen Sts., Pittsburg, $73,511; Joseph Fuccy, Weston, W. Va., $75,161; F. C. Welch Co., Clarksburg, $75,884; F. P. Cummings, Du Bois, Pa., $104,020. Hering & Fuller, 170 Broadway, New York, are Engrs.

GRAND RAPIDS, MICH.—Bids will be received until July 7 by the Board Public Works, Samuel A. Freshney, Secy., for constructing a clear water conduit, intake and drain.

*GRAND RAPIDS, MICH.—Bids are asked by the Board of Public Works until 8 p. m., July 21, for furnishing and installing pumping machinery in connection with the filtration plant. Samuel A. Freshney is Secy. and Gen. Mgr.

*CARROLLTON, ILL.—Bids will be received by the Commissioners of the Eldred Drainage and Levee District, Carrollton, until 2 p. m., July 22, for furnishing and erecting a complete pumping plant, including sluiceways and foundations. The pumping plant will be used for the drainage of agricultural lands; and shall have a capacity of 120 cu. ft. per second against a maximum static head of 20 ft. Harman Engineering Co., 120 Fredonia Ave., Peoria, Ill., are Engrs. For details see advertisement in this issue.

HARVARD, ILL.—Bids are asked by the City Council until 8 p. m., July 5, for laying a 4-in. water main of c. i. pipe, and several fire hydrants. P. E. Saunders, is City Clk.

SPOONER, WIS.—Bids will be received until 8 p. m., July 5, by the Common Council for furnishing material and laying 2,500 ft. of 4-in. water main and furnishing four hydrants. George B. Sage is City Clerk.

VIROQUA, WIS.—Bids are asked by the city until July 7 for erecting a brick and stone pumping station. Parkinson & Dockendorff are Archs., La Crosse, Wis.

CLINTON, WIS.—Bids are asked until noon July 1, by the village for the construction of a concrete reservoir, 14 × 14 × 40 ft. F. M. Barrus is Village Clk.

HAVELOCK, NEB.—Contract for the construction of the water system extensions here has been awarded to the INTER-MOUNTAIN BRIDGE CONSTRUCTION CO., of Tecumseh, Neb.

Contract for hydrants and valves was let to the WESTERN VALVE CO., of Chicago, Ill. Bids were opened on June 7.

FORT MEADE, S. DAK.—We are officially advised that bids for a concrete dam and clearing reservoir site have been rejected. New bids are asked until July 20.

CHEYENNE, WYO.—We are officially advised that bids were received on June 21 by the Water and Sewerage Committee for the construction of a reinforced-concrete lined reservoir, five miles from the city, requiring approximately 2,800 cu. yds. of concrete and 55 tons reinforcement. Cement, pipe and specials will be furnished by the city. The entire work is to be completed within 3½ months after date of awarding contract. The bids follow: The BLACK & LAIRD CONSTRUCTION CO., Denver, Colo., $29,800 (awarded contract); the Colorado Engineering & Construction Co., Greeley, Colo., $31,-200; J. A. Warren, Cheyenne, $32,736; Finger & Kelley, $33,000; Williams & Williams, Scotts Bluffs, Neb., $34,605. F. A. Baron is City Clk.

HUNTSVILLE, MO.—Bids were opened on June 14 for constructing water-works from plans of L. G. Knapp & Co., New York Life Bldg., Kansas City. Contracts have been awarded as follows: C.-i. pipe and specials, to the UNITED STATES PIPE CO., St. Louis, 159 tons 4 to 22-in. and seven tons 4 to 23.3-in., at $29.20 per ton; 67 tons 6 to 34-in., $27.95 per ton, and 102.5 tons, 8 to 48-in., $28.20 per ton; 5.1 tons specials, $55 per ton; hydrants and valves, to LUDLOW VALVE CO., Kansas City; tower and tank, to CHICAGO BRIDGE & IRON CO., Chicago, Ill., at $4,999; construction work, laying of pipe, setting of hydrants, etc., to G. JAEGER of Rich Hill, Mo., at $11,160.

FORT LOGAN H. ROOTS, ARK.—Contract for the erection of a 150,000-gallon steel tank and trestle and raising present 30,000-gallon tank and trestle at Fort Logan H. Roots, has been awarded to R. M. GALBRAITH, of Pine Bluff, Ark. Bids were opened on June 6. List of bidders noted on June 16.

PLAINVIEW, TEX.—Bids will be received until July 1 by the Village Council for furnishing 3,450 ft. of 4-in. c.-i. water pipe, elbows, hydrants, etc.

CENTER, TEX.—The contract for the extension of the water-works has been let to H. G. BARROW. The contract specifies that a steel tower be erected and a steel tank holding 900,000 gallons of water provided, the top of the tank to be 100 ft. from the ground. The deep well will be used for water supply.

FORT SILL, OKLA.—LEYSTER & LOWES, of Dayton, Ohio, have been awarded contract for constructing at Fort Sill a 500,000-gallon reinforced concrete reservoir at $26,600, and a sewerage purification plant at $12,600.

LAS ANIMAS, COLO.—The Bent County Reservoir Co. whose project will reclaim 20,000 acres has awarded the contract to the KAW VALLEY CONSTRUCTION CO., of Kansas City, for building a dam one-half mile long across Rule Creek and a large reservoir near the dam. The reservoir will have an average depth of 30 ft. and a capacity of 30,000 acre ft. Estimated cost, between $600,000 and $800,000.

SULTAN, WASH.—Bids received on June 15 by the Town Council for a water system have been rejected. New bids will be received until July 13. Estimated cost, $14,-500.

PORTLAND, ORE.—Bids have been opened as follows by the Water Board for furnishing 30-in. steel pipe for a submerged main across Willamette River at Clay St.: Crane & Co., $30,800; the National Tube Co., $31,-350.

Contract for the submerged pipe to augment the water supply of the West Side was awarded by the Water Board on June 14 to ROBERT WAKEFIELD, at $58,000, and contract for supplying gates and valves for the Mount Tabor reservoirs to the PHOENIX IRON WORKS at $15,000.

SAN FRANCISCO, CAL.—The Board of Public Works on June 13 approved the plans and specifications for laying pipe in the auxiliary water system in the first district, north of Market St. and east of Powell St. Bids are asked until July 6.

EL CENTRO, CAL.—Bids were opened on June 14 for furnishing material and constructing a municipal water system. Contracts have been awarded as follows: 400 tons of c.-i. pipe, specials, hydrants and valves, to U. S. PIPE CO., of San Francisco, at $21,644; tower and tank to DES MOINES BRIDGE & IRON CO., of Des Moines, Iowa, at $6,450; distillate engines to DELTA IMPROVEMENT CO., El Centro, at $5,468; unloading, hauling and laying pipe, C. B. FOLSOM, of El Centro, at $6,143. The specifications for the distillate engines call for two 40-HP. engines and two 500-gallon centrifugal pumps, working against 150-ft. heads. The tank is to be 75 ft. high and of 100,000 gallons capacity.

AZUSA, CAL.—The Azusa Irrigating Co., care First National Bank, Azusa, has awarded contract to BYRON JACKSON MACHINE WORKS, 212 North Los Angeles St., Los Angeles, for the installation of a turbine pump, motor and appurtenances at $5,848. Work includes extra heavy I-beams, concrete foundation, derrick of 8 × 8, posts on concrete piers, etc.

ESCONDIDO, CAL.—The directors of the Mutual Water Co., Lewis Hops, Jr., Constructing Engr., will purchase machinery for the construction of a tunnel at the headworks. Estimated cost, $12,000.

SEWERS.

(denotes that this work is advertised in Engineering News.)*

BOSTON, MASS.—Contract for constructing pipe sewers in Washington and Fuller Sts., Dorchester, bids opened on June 14, has been awarded to JOSEPH B. O'ROURKE & CO., 83 Journal Bldg., at $4,095.

BROOKLINE, MASS.—Contract for constructing a sewer and surface water drain in Lee St. and Hillside Road was awarded on June 22 to M. J. O'HEARN, at $9,635.

FALL RIVER, MASS.—See item under Water Supply—Irrigation.

BOSTON, MASS.—We are officially advised that bids were received on June 15 by the Metropolitan Water and Sewerage Board, Boston, Henry H. Sprague, Chn., for constructing about 6,000 ft. open channel, 3,450 ft. 33 × 33-in. concrete drain, 960 ft. 24-in. vitrified clay pipe drain, etc., in Framingham, Natick and Wayland. The bids follow: HENRY SPINASH CONTRACTING CO., Waterbury, Conn., $30,981 (awarded contract); Coleman Bros., Chelsea, Mass., $31,298; S. Camora, Boston, $32,238; Andrew M. Cusack, Boston, $32,311; John J. Falvey, Somerville, Mass., $33,228; Michael M. Russo, Boston, $33,486; Bruno & Petitti, Boston, $33,664.

PUTNAM, CONN.—Bids will be received by the Highway Committee, G. Allen Hawkins, Chn., until July 6 for the construction of sewers from Quinnebaug River, through Chapel, Bridge, Church and Marshall Sts. and Woodstock Ave. Chandler & Plamer, Norwich, Conn., are Engrs.

*HARTFORD, CONN.—Bids for the construction of the East Side Interceptor were received by the Board of Contract and Supply on June 27, as follows: George Phillips, Dorchester, Mass., 250 days, $162,618; Hagarty & Drummond, New York, 400 days, $208,239; Metropolitan Contracting Co., Boston, Mass., 175 days, $176,637; Hartford Paving & Construction Co., Hartford, $158,-161; Edward Balf Co., Hartford, $209,196. Referred to the City Engineer.

Contracts for sewer work, bids for which were opened on June 20, have been awarded by the Board of Contract and Supply as follows: Hillside Ave. section, to O'NEIL BROS. & NERO, Hartford, $14,499. Park St. section, to HARTFORD PAVING & CONSTRUCTION CO., Hartford, $3,270; Cabot St. section, to LOUIS PETROSSI & CO., Hartford, $7,260.

ALBANY, N. Y.—See item under Streets and Roads.

NEW BRIGHTON (S. I.), N. Y.—Bids are asked until noon, July 12, by George Cromwell, Pres. Boro. Richmond, for furnishing all the labor and material required for constructing a temporary sanitary sewer with the necessary appurtenances in Todt Hill Road, from Richmond Turnpike to Schmidt's Lane, and in Housman Ave., from Todt Hill Road to a point about 1,310 ft. easterly therefrom, together with all work incidental thereto; for furnishing all the labor and materials required for constructing a temporary combined sewer and appurtenances in Hope Ave. from New York Ave. to the S. I. R. T. R. R. tracks, together with all work incidental thereto.

ROME, N. Y.—Bids will be received until July 4 by the Board of Managers, R. C. Briggs, Pres., for a sewage disposal plant at the Rome Custodial Asylum, Rome. Franklin B. Ware is State Arch., Albany; Charles Bernstein is Supt.

BROOKLYN, N. Y.—Bids were received by Alfred E. Steers, Pres. Brooklyn Boro., on June 8, for furnishing material and constructing sewers in Ocean Ave., with outlet sewer in Avenue L, in East 21st St., and in Ave. M. Bids were submitted on the percentage basis as follows: Sherman & Nicholas, Brooklyn, 97½%; Merrill Ruckgaber Co., 30 Church St., New York, 132½%; Donegan & Redmond, Brooklyn, 98.98%; Z. E. Kelly, Brooklyn, 107½%; Pansio & Burke, Brooklyn, 95%; Newman & Carey, Brooklyn, 93.74%; Culp & McCauley, Brooklyn, 93.47%. Engineer's estimate, $27,180. The work includes 3,260 lin. ft. 48, 42, 36 and 30-in. brick sewers, and 2,120 lin. ft. 24, 15, and 12-in. pipe sewer; 3,000 lin. ft. 6-in. house connections, 41 manholes, 25 M. ft. lumber for sheeting and bracing, and 25 M. ft. for foundation planking.

Bids are asked until 11 a. m., July 13, by the Borough President for furnishing all the labor and materials required for repair of sewer in Navy St., between Nassau St. and Prospect St.

NEW YORK, N. Y.—Bids are asked until 2 p. m., July 6, by George McAneny, Pres. Boro. of Manhattan, for furnishing all the labor and materials required for sewer and appurtenances in 151st St., between Riverside Drive and Broadway; for furnishing all the labor and materials required for construction of sewer and appurtenances in Northern Ave., between 181st St. and 190th St.

NEW YORK, N. Y.—Bids are asked by Cyrus C. Miller, Pres. Boro. of The Bronx, until 11 a. m., July 14, for completing the contract which was executed by the Wakefield Construction Co. on Oct. 16, 1909, and declared abandoned on May 16, 1910, for constructing an outlet sewer and appurtenances in White Plains Road, between East River and East 152d St.; in East 152d St., between White Plains Road and Ave. B; in Ave. B, between East 152d St. and Lafayette Ave. (East 156th St.), and in Lafayette Ave. (East 156th St.), between Ave. B and Ave. A.

NEW YORK, N. Y.—Contract for constructing the outlet sewer under the pier at the foot of West 40th St. has been awarded to JOSEPH MOORE, 5 East 42d St., at $12,-694. Bids were opened on June 9. List of bidders noted on June 16.

RIDGEWOOD, N. J.—The UNION BUILDING & CONSTRUCTION CO., Passaic, N. J., has been awarded contract, at $26,119, for the construction of a storm sewer about 2,042 ft. of reinforced concrete construction and 3,430 ft. of vitrified pipe with necessary manholes, catch basins, etc.

*PLAINFIELD, N. J.—ALFONSO COLUCCI, of Plainfield, has secured contract, at $3,279, for the construction of sanitary sewers in East Front St., from Berckman St. to Leland Ave., and in Central St., from Seventh St. to Woodland Ave. Bids were opened on June 6. Noted on June 16.

*WESTFIELD, N. J.—Bids will be received until 8.15 p. m., July 18, by the Town Council for sanitary sewers. For details, see advertisement in this issue. Lloyd Thompson is Town Clk.

*FREEHOLD, N. J.—We are officially advised that bids were received on June 22 by the city for sewerage extensions and pumping stations. The proposed work consists of approximately 18,000 ft. of 8-in. sewers; 3,-400 ft. of 4-in. iron pipe force mains; three pumping stations (not including houses and machinery); also manholes, lampholes, flushtanks, and other appurtenances. The bids follow: Arthur K. Hillpot, Red Bank, N. J., $18,915; Edmund F. Saxton, 114 Liberty St., New York, $19,383; D'Amato & Stefanelli, Newark, N. J., $22,583; Liddle & Pfeiffer, Perth Amboy, N. J., $23,482; Denise & Buch, Freehold, $25,590; William and John Smith & S. L. Bartholomew, Asbury Park, N. J., $28,298; Martin & Miller, Roselle Park, N. J., $28,627; McGovern Contracting Co., Trenton, N. J., $29,420. Waring, Chapman & Farquhar, 874 Broadway, New York, are Engrs.

ELIZABETH, N. J.—Bids are asked until 8 p. m., July 15, by the City Council for sewer and appurtenances. N. K. Thompson is St. Comr.

*AVONMORE, PA.—We are officially advised that bids were received on June 23 for 15, 10 and 8-in. sewers and appurtenances. Contract has been awarded to DUSTER CONSTRUCTION CO., of Tarentum, Pa., at $2,-860. Robert H. Williams is Boro. Engr., Saltsburg, Pa.

*PHILADELPHIA, PA.—Bids are asked by George R. Stearns, Dir., Department of Public Works, until noon, July 20, for Schedule A, main sewer; Schedule B, widening Delaware Ave.; Schedule C, Pennypack Creek sewage disposal works.

TOWSON, MD.—The Courthouse Commission has awarded contract, at $4,475, to WILLIAM R. ROTHROCK & CO., 23-25 Light St., Baltimore, Md., for constructing a sewage-disposal plant.

HANCOCK, MD.—Bids are asked by the town until July 6 for sewer and water supply system here. R. T. McCandlish is Clk.

BALTIMORE, MD.—The Realty Securities Corporation, 301 St. Paul St., has awarded contract to UNITED ENGINEERING & CONSTRUCTION CO., Sexton Bldg., Baltimore, for the construction of sewers in Allendale Road and Duvall Ave., Forest Park.

We are officially advised that bids were received as follows on June 15 by the Board of Awards for Sanitary Contract No. 53, lateral sewers in District No. 25: D. V. Ault & Co., Baltimore, $33,942; B. F. Sweeten & Son, Baltimore, $34,431; Irwin Brothers, Greenville, Ohio, $42,193; W. H. and C. F. Thompson, Baltimore, $46,097; William McCarthy & Co., Baltimore, $50,212. The contract has been awarded to D. V. AULT & CO. Colvin W. Hendrick is Ch. Engr., Sewerage Comn.

PRINCETON, W. VA.—T. TOWLES & CO., of Princeton, have secured contract, at $30,-000, for the construction of 24-in. and 30-in. c.-i. pipe sanitary sewers and from 10-in. to 24-in. terra cotta pipe sewers. Bids were opened on June 8.

FLORENCE, S. C.—The JOHNSON-MATTHEWS CONSTRUCTION CO., of Charleston, has secured the contract for constructing the sewerage system here, at $89,368.

COLUMBIA, TENN.—Contract for the new Helm's branch sewer was let on June 17 to JOHN BRODERICK & SONS, Nashville, at $5,750, the lowest bid.

*UNION CITY, TENN.—Bids will be received by the Mayor and Board of Aldermen at the Mayor's office, until 2 p. m., July 21, for the furnishing of the necessary material and constructing a system of sanitary sewers within the city, in accordance with plans and specifications on file in the Mayor's office. C. H. Jenks is Engr., Fayette, Miss.

LOUISVILLE, KY.—Bids will be received until July 8 by the Commissioners of Sewerage, for the Oak St. sewer, Section B, Contract 71. T. B. F. Breed is Ch. Engr.

LORAIN, OHIO.—Q. G. CHAPMAN, Pearl Ave., Lorain, has secured contract at $19,-550, for the construction of a sanitary sewer in Pearl Ave.

CANTON, OHIO.—P. HAHN & SON, of Canton, have secured contract for constructing the Liberty and Saxton St. storm water sewer at $24,139.

JEFFERSON, OHIO.—BALDWIN BROS., of Cleveland, Ohio, have secured contract at about $19,000 for the construction of a disposal plant. Bids were opened on June 6.

MINERVA, OHIO.—Bids are asked by Austin H. Freed, Village Clk., until noon, July 18, for a 2-ft. sewer.

WOOSTER, OHIO.—Bids are asked until noon, July 5, by the Director of Public Service for sewering Quimby Ave. H. C. Crowe is Clk.

LAPORTE, IND.—Bids for constructing approximately 4.14 miles of sewers, which were to have been opened on June 13, will be opened in about six weeks.

BEECH GROVE, IND.—The Town Trustees will receive bids until 8 p. m., July 5, for the construction of a large sewer in Main St. E. C. Martin is Clk.

DANVILLE, ILL.—The Board of Local Improvements has decided to construct a storm water sewer in Fairchild St. Estimated cost, about $20,000.

DELAND, ILL.—ARTHUR BIRK, 1645 East Main St., Decatur, Ill., has secured contract at $10,774 for furnishing, hauling and laying the following drain tile: 4,000 ft. 27-in., 4,000 ft. 24-in., 3,733 ft. 22-in., 3,167 ft. 16-in., 1,000 ft. 14-in. and 700 ft. 12-in.; all tile above 16 ins. in diameter to be salt glazed vitrified, first-class drain tile; all tile 16 ins. and smaller to be red shale tile, first-class quality. W. J. Day, Bement, Ill., is Engr. Bids were opened on June 17.

SIDNEY, IOWA.—J. J. DUNNEGAN has secured contract at $16,000 for the construction of 32 blocks of sewer in this city.

DES MOINES, IOWA.—Bids are asked until 9 a. m., July 6, by the City Council for the construction of sewers in various streets. Neal Jones is City Clk.

*WAVERLY, IOWA.—Bids are asked until 5 p. m., July 5, by the City Clerk, for the construction of a sanitary sewer.

LEON, IOWA.—Bids are asked until 8 p. m., July 12, by the city for two miles of 6 to 12-in. pipe sewers and disposal plant. Iowa Engineering Co., Clinton, Iowa, are Engrs.

WINONA, MINN.—Bids will be received until 8.30 p. m., July 11, by Paul A. Jasmer, City Recdr., for a storm water and sanitary sewer in Third and Liberty Sts.

TRACY, MINN.—Bids will be received until July 7 by Lester J. Fitch, City Recdr., for constructing a partial sewer system.

HERINGTON, KAN.—Bids will be received until July 12 by G. W. Grause, City Clk., for constructing a sewer system here. Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are Engrs.

OMAHA, NEB.—Bids are asked until 10 a. m., July 5, by the City Engineer for the construction of sewers in various streets. Dan B. Butler is City Clk.

GRAND FORKS, N. DAK.—Bids are asked until 4 p. m., July 5, by Charles J. Evanson, City Audr., for the construction of a lateral sewer and appurtenances in the alley between Third St. and Fourth St., from De Mers Ave. to Kitson Ave.

*ST. LOUIS, MO.—The Board of Public Improvements on June 21 awarded contract for the construction of the first section of the Baden sewer to the HOFFMANN-HOGAN CONSTRUCTION CO., 2712 Wyandotte St., St. Louis, at $288,157, which is about $25,-000 above the original estimate. A bill to appropriate the difference was passed by the Municipal Assembly recently.

Bids were also opened on the second section of River Des Peres' foul water sewer. The Universal Construction Co. submitted the lowest of four bids, at $604,519. Other bids were: Scott, Hannon & Hickey, $616,-519; John F. McMahon, $614,638, and Fruin-Colnon Contracting Co., $678,033. The estimate was $615,000. The Board did not award the contract.

CARTERVILLE, MO.—Bids are asked until 5 p. m., July 7, by the city, for the construction of a sanitary sewer in sewer district No. 5. F. A. Funk is City Engr.

MONTGOMERY CITY, MO.—See item under Water Supply-Irrigation.

DEXTER, MO.—See item under Water Supply-Irrigation.

BELTON, TEX.—All bids received on June 14 by the Belton Sanitary Sewer Co., Charles B. Smith, Secy., for furnishing material and constructing a sanitary sewer system and a sewage purification plant have been rejected. New bids will be received until July 5. The sewerage system includes about 23,415 ft. of 12-in., 10-in., and 8-in. vitrified pipe sewers, 67 manholes, ten flush tanks. The sewer purification plant includes 3,556 cu. yds. earth excavation, 366 cu. yds. rock excavation, 118 cu. yds. reinforced concrete, 80 cu. yds. plain concrete, 500 cu. yds. broken stone, piping and accessories. The Fountain-Shaw Engineering Co., Andrews Bldg., Dallas, are Engrs.

OKLAHOMA CITY, OKLA.—Bids are asked until July 5 by the city for a lateral sewer in Winans Highland Terrace addition, Winans Second addition, University addition, and portions of Central Park, Ross-Mann, Grandview and Central Northwest additions. Bob Parman is City Clk.

FORT SILL, OKLA.—See item under Water Supply-Irrigation.

SEATTLE, WASH.—Contract has been awarded by the Board of Public Works to DICKENS & RIGHTWIRE for the construction of sewers in First Ave., South and other streets at $15,893. R. H. Thomson is City Engr.

SEATTLE, WASH.—Bids are asked until July 1 by the Board of Public Works for the Lake Washington section of the North Trunk sewer. R. H. Thomson is City Engr.

SAN FRANCISCO, CAL.—Bids will be received by the Board of Public Works until 2 p. m., July 6, for the construction of sewers and appurtenances in Kentucky and Fourth Sts. Marsden Manson is City Engr.

ST. MARIES, IDAHO.—The Sewer Commissioners for Improvement District No. 1 have awarded contract for the construction of a trunk sewer and laterals to MOORE & WASHTOP, of Spokane, Wash., at about $8,000.

*TORONTO, ONT.—Bids are asked by G. R. Geary, Mayor and Chn. Bd. of Control, until noon, July 26, for Section No. 6, High Level Interceptor. For details see advertisement in this issue.

SWIFT CURRENT, SASK.—Bids are asked until 8.30 p. m., July 12, by George W. Bilbrough, Secy.-Treas., for the following, more or less, delivered f. o. b. Swift Current, freight, duty and breakage free: 18,700 ft. 7-in., 4,250 ft. 10-in., 3,450 ft. 12-in., 3,150 ft. 15-in., 500 ft. 4-in., 100 ft. 6-in., 695 4-in. off 7-in. salt-glazed standard vitrified tile pipe, Y junction; 95 4-in. off 10-in. salt glazed standard vitrified tile pipe, Y junction; 70 4-in. off 12-in. salt glazed standard vitrified tile pipe, Y junction; 20 6-in. off 12-in. salt glazed standard vitrified tile pipe, Y junction; 300 4-in. ⅛th bends; 20 6-in. ⅛th bends. J. Darlington Whitmore is Engr., Regina.

SASKATCHEWAN, SASK.—Bids are asked by W. F. Heal, City Hall, until 8 p. m., July 18, for Contract "A," supplying material for and constructing a sewage disposal plant complete and laying a trunk sewer.

REGINA, SASK.—All bids, it is reported, received by the Council for constructing the north portion of the trunk sewer have been rejected, and the work is to be done by the city, through its engineering department. The lowest bid was $208,463, which exceeded the engineer's estimate.

STREETS AND ROADS.

(denotes that this work is advertised in Engineering News.)*

CONCORD, N. H.—We are officially advised that bids were received by H. C. Hill, State Engr., Concord, on June 17 for constructing 6½ miles of native stone road in Wakefield. The contract has been let to E. J. ROUKE, of Abington, Mass.

BOSTON, MASS.—The Mayor has approved a contract with J. DOHERTY for laying wood block pavement in Milk, Pearl and Oliver Sts., at $8,604. Other bids received were J. S. Wood Preserving Co., $9,112; J. B. O'Rourke & Co., $10,330.

LAWRENCE, MASS.—We are officially advised that bids were received by A. D. Marble, City Engr., on June 13, for paving Broadway and other streets. The contract for paving Broadway with small granite blocks on concrete base has been let to PHILIP & HOLLAND, of Lawrence, at $2.91 per sq. yd. The contracts for paving other streets have not been let.

EAST HARTFORD, CONN.—L. C. BAKER, of New Britain, Conn., has been awarded the contract for laying sidewalks and curbing in the town of East Hartford. The Board of Commissioners held a meeting on June 22 and made the award. Mr. Baker's figures for the work were: Grading, $850; concrete walks, $8,702; concrete curbing, $480; making a total of $10,032.

HARTFORD, CONN.—The list of bids received on June 24 and contracts let by the State Highway Commissioners for constructing State roads in the towns of Plainville, Ellington, Seymour, etc., will be published next week.

NEW BRITAIN, CONN.—We are officially advised that WARREN BROS. CO., of Boston, Mass., has been awarded a contract for 24,000 sq. yds. of bitulithic pavement.

HARTFORD, CONN.—Bids will be received by the State Highway Commissioner until 3 p. m., July 1, for the construction of about 5,300 lin. ft. macadam road in the City of New Haven. Plans and specifications with C. W. Kelly, City Engr., New Haven.

Plans for proposed state road work have been received by the State Highway Commissioner from Alexander Cahn, C. E., for three sections of road in North Haven, and one section in Beacon Falls.

Bids for state road work will be received at the office of the State Highway Commissioner, Capitol, until 2 p. m., July 11, as follows: Town of Plainville, 7,298 lin. ft. macadam, including one 15-in. tile culvert. Plans and specifications with P. J. Prior, First Selectman, Plainville. Town of Winchester, 10,750 lin. ft. macadam on the Norfolk Road, including ten 15-in., five 18-in., five 20-in. and three 24-in. tile culverts. Plans and specifications with Edward Finn, First Selectman, Winsted. Town of Mansfield, one section of graded road, 13,941 lin. ft., including four 18-in., two 15-in. and one 12-in. tile culverts. Also two sections of gravel road, aggregating 4,100 lin. ft., including two 20-in. tile culverts Plans and specifications at Town Clerk's office, Spring Hill Town of Bolton, 3,640 lin. ft. graded road. Plans and specifications at Town Clerk's office, Bolton. Towns of Avon and West Hartford, 17,585 lin. ft. of macadam, including three 15-in., nine 18-in., five 24-in., one 20-in. and three 12-in. tile culverts. Plans and specifications at Town Clerk's office, Avon. Town of Warren, 1,900 lin. ft. graded road, including two 15-in. and one 24-in. tile culverts. Plans and specifications with William Forestelle, First Selectman. Town of Farmington, 9,104 lin. ft. macadam road. Plans and specifications with E. M. Ryan, First Selectman, Unionville.

NEW YORK, N. Y.—Bids are asked by the Park Board until 3 p. m., July 7, for repaving, where directed, with rock asphalt mastic part of the sidewalks surrounding Central Park, Boro. of Manhattan, the City of New York.

Bids are asked by George McAneny, Pres. Boro. of Manhattan, until 2 p. m., July 6, for resurfacing with macadam pavement the roadway of Riverside Drive, from 161st St. to Broadway and Dyckman St.

Bids are asked by Cyrus C. Miller, Pres. Boro. of the Bronx, until 11 a. m., July 7, for regulating, grading, paving, etc., various streets in the Bronx.

The following bids were received on June 23 by the Park Board for repairing sheet asphalt or asphalt block roadway pavements where directed in the Borough of Manhattan: Barber Asphalt Paving Co., 30 Church St., New York, $6,986; Uvalde Asphalt Paving Co., 1 Broadway, New York, $8,725; Sicilian Asphalt Paving Co., 41 Park Row, New York, $9,625.

ALBANY, N. Y.—The bids received on June 20 by the Board of Contract and Supply for the improvement of Swan St. from Sheridan St. to Clinton Ave., were: John M. Holler, $5,168; Edward F. Dillon, $6,036; Mulderry Bros., $5,296; Michael F. Dollard, $5,173. The bidders were all of Albany. Walter Melius is City Engr.

Bids are asked by the Board of Contract and Supply until 3 p. m., July 5, for the improvement of Morris St., from west line of Partridge St. to the east line of Main Ave.; for the improvement of West Lawrence St., from Madison Ave. to the south line of Myrtle Ave.; improvement of Hurlbut St., between Second and Delaware Aves.; improvement of Myrtle Ave., from the west line of West Lawrence St. to east line of South Allen St. The work covered in the above contracts includes grading the streets, setting granite curbs, paving the carriageways with repressed vitrified shale paving blocks on a concrete foundation, and laying vitrified pipe sewers. Bids will be received at the same time for laying a vitrified stoneware pipe sewer in Manning Boulevard. Walter Melius is City Engr. Isidore Wachsman is Secy. of Bd.

SCHENECTADY, N. Y.—The SCHENECTADY CONTRACTING CO. has secured the contract for paving Hegeman St. with asphalt at $2.20 per sq. yd., and the UNION PAVING CO. the contract for paving Weaver St. at $2.20 per sq. yd. for asphalt and $2.90 per sq. yd. for granite.

*FREEHOLD, N. J.—Bids will be received by the Board of Chosen Freeholders of Monmouth County, N. J., in their office in the Court House, Freehold, N. J., until 11 a. m., July 13, to build gravel roads as follows under the provisions of the New Jersey State Aid Road Laws, in Monmouth County: The Allentown and New Egypt Road (via Davis and Cream Ridge), a distance of 10,276.4 ft. or 1.946 miles; Section 2 of the Red Bank and Holmdel Road, from the end of First Section westerly to the top of the hill 350 ft. west of bridge near Brown's estate, a distance of 8,187 ft. or 1.55 miles; the Southard Road leading from Adelphia to Lakewood (via Southard) the third section thereof beginning at the southerly end of the iron bridge over the Manasquan River and running southerly a distance of 2.516 miles to the southerly end of Section 2. William B. Conover is Dir.; Peter Forman, Engr.-in-Charge, R. F. D., Englishtown, N. J., postoffice.

TRENTON, N. J.—We are officially advised that the contract has been let to UNITED PAVING CO., of Atlantic City, N. J., for 14,450 sq. yds. of bitulithic paving in Trenton.

CORAOPOLIS, PA.—The contract for constructing 50,000 ft. of stone sidewalks has been awarded to R. L. HARPER, of Coraopolis, at 13 cts., sand finish; 13½ cts., ligonier, and 25 cts. a cu. yd. for excavating above curb level. E. C. Harper is Boro. Secy.

SEWICKLEY, PA.—Bids are asked by Minot M. Baker, Acting Engr., Town Hall, Sewickley, until 4 p. m., July 5, for paving with vitrified brick on Nevin Ave. and Straight and Grimes Sts.

PITTSBURG, PA.—We are officially advised that bids were received on June 24, by R. J. Cunningham, Controller of Allegheny County, for improving (a) Perryville Extension No. 1 Road, 1½ miles, and (b) Turtle Creek and Monroeville (Hill Route) Road, 2¼ miles. Contracts have been let as follows: (a) FOLEY BROS., Rochester Road, at $39,764; (b) W. E. HOWLEY, Frick Annex, at $22,379.

SHENANDOAH, PA.—Bids will be received by the Town Council of the Borough of Shenandoah, Pa., until 6 p. m., July 7, for paving West Coal St., from Main St. to West St., and White St., from Centre to Oak Sts., with vitrified paving blocks on a 6-in. concrete base, and for furnishing and setting new curb and resetting old curb. John M. Schaeffer is Chn. of Roads and Highway Com.

BALTIMORE, MD.—Bids will be received until noon, July 6, by State Road Commission, Union Trust Bldg., Baltimore, for building various sections of state highway, aggregating 19.33 miles, in the State of Maryland. E. E. Goslin is Secy.

Bids are asked by the Board of Awards of the City of Baltimore until 11 a. m., July 6, to renew such armored concrete curb on York Road as may be ordered by the City Engineer; for long leaf yellow pine paving blocks delivered f. o. b. Baltimore; for all the labor and material necessary to erect in place the steel floor joists under the roadways of Guilford Ave. bridge over Jones' Falls. B. T. Fendall is City Engr.

TOWSON, MD.—Bids are asked until noon, July 14, by Henry G. Shirley, Roads Engr., Highways Comn., Baltimore County, at Towson, for improving Hillsdale Road, from the Liberty Road to Forest Ave., First District of Baltimore County.

PRINCETON, W. VA.—The contract for paving three miles has been awarded to T. FOWLER CO., of Princeton, at $35,000, for brick paving, and $35,000 for tarvia macadam. R. F. Van Antwerp is Ch. Engr. of Paving and Sewers.

PENSACOLA, FLA.—See item under Sewers.

DECATUR, ALA.—New Decatur has let the contracts for street paving and sidewalk building to the total amount of $38,620. A contract to the amount of $26,696 for paving Johnson and Jackson Sts. has been let to GOODRICH & CRINKLEY, of Decatur, and a contract for cement sidewalks to the amount of $11,924 has been let to W. M. LEFTWICH & CO., of Nashville, Tenn. This work will commence within the next few days and will be completed as soon as possible.

JACKSON, MISS.—The City Council on June 8 awarded paving contracts as follows: SOUTHERN BITULITHIC CO., Nashville, Tenn., 12,000 yds. at $2.15; the R. S. BLOME CO., 79 Dearborn St., Chicago, Ill., 11,700 yds. granitoid at $1.98; McPHOLON & O'GARA, Birmingham, Ala., 8,300 yds. wood block at $2.05; COPELAND & ENGLISH, Birmingham, Ala., 6,000 yds. brick at $2. The contracts cover about 38,000 yds. and amount to approximately $85,000.

TUPELO, MISS.—Bids are asked by the Third District of Lee County until July 6 for 20 miles of road construction. At same time $100,000 of interest bearing bonds will be sold. D. W. Robins, of Tupelo, is Secy. of Comn.

CROWLEY, LA.—Bids are asked until July 5 by the City Council for constructing about 15 miles of cement walks in this city, the work to be finished in six months.

LOUISVILLE, KY.—Bids are asked until July 7 by the Board of Public Works for paving 17 blocks of streets in Louisville.

YOUNGSTOWN, OHIO.—We are officially advised that bids were received on June 25, by W. H. McMillin, Clerk Board of Public Service, for furnishing material and paving a portion of Kensington and Madison Aves., 3,000 sq. yds. and 2,000 sq. yds., respectively. Also for grading Shehy St., between Wilson Ave. and Edgewood St. W. H. McMillin is City Clerk. The lowest bidder for Kensington and Madison Aves. was Kennedy Bros.

PORTSMOUTH, OHIO.—The Board of Control awarded the following contracts on June 20: Paving Waller St., from Eleventh St. to Kinney's Lane, KELLEY BROS., Peebles block, $18,846; Seventh St., from Campbell Ave. to Lawson's Run, KELLEY BROS., Peebles block, $8,828; Oakland Ave., from 17th St. to Kinney's Lane, KAYS BROS., Portsmouth block, $3,613.

MANSFIELD, OHIO.—Bids are asked by the Board of Commissioners of Richland County until noon, July 6, for grading and macadamizing 2.32 miles of road in Plymouth and Cass Townships under the provisions of the State Aid Law. James C. Wonders, Columbus, Ohio, is State Highway Comr. Estimated cost, $18,167.

LISBON, OHIO.—Bids will be received by the Board of Commissioners of Columbiana County until noon, July 7, for grading and paving with brick 1.5 miles of roads in Fairfield Township under the provisions of the state highway law. J. C. Wonders is State Highway Comr., Columbus, Ohio. Estimated cost, $20,099.

WOOSTER, OHIO.—Bids will be received at the office of the Commissioners of Wayne County, Wooster, until noon, July 8, for grading and paving with brick 1.08 miles of road in Canaan Township, under the provisions of the State Highway Law. Estimated cost of construction, $13,172. James C. Wonders is State Highway Comr., Columbus, Ohio.

Bids will be received by the Director of Public Service of the City of Wooster, at the office of the Department of Public Service, until noon, July 5, for furnishing the necessary labor and materials for the paving of Madison Ave. H. F. Crowl is Clerk.

SANDUSKY, OHIO.—Bids will be received until July 14 by the Board of Public Service for grading, curbing and paving with asphalt on portions of Franklin, Washington and Neil Sts., in all about 25,000 sq. yds. and 12,000 lin. ft. of curbing. John Bing is Dir.

FINDLAY, OHIO.—Bids will be received until July 8 by the Board of County Commissioners for constructing five miles of stone pike in Delaware Township. Frank C. Shank is County Audr.

STRUTHERS, OHIO.—Bids will be received until July 20 by L. S. Creed, Village Clk., for furnishing material and constructing brick pavement on Bridge St., from the bridge over the Mahoning River southerly to Yellow Creek bridge.

SPRINGFIELD, OHIO.—We are officially advised that bids were received by the Commissioners of Clark County, at Springfield, on June 23, for grading and macadamizing 2.5 miles of road in Springfield Township, under the provisions of the State Highway Law. Estimated cost, $12,021. James C. Wonders is State Highway Comr., Columbus, Ohio. The contract has been let to MAHER & CHADWICK, of Dayton, Ohio, at $12,010.

CINCINNATI, OHIO.—Bids will be received at the office of the Board of County Commissioners until noon, July 15, for the following county work: Under Specifications No. 47, for improvement of the Harrison and New Haven Road, from the Harrison Pike to the M. R. bridge at New Baltimore in Harrison and Crosby Townships. Fred Dreihs is Clerk.

Bids will be received at the office of the Director of Public Service, City Hall, Cincinnati, Ohio, until noon, July 6, for furnishing the necessary labor and materials for the improvement of Young St., from the north curb of Bodman St. to the south curb of Southern Ave., by grading and constructing macadam roadway, cinder walks, brick crossings and necessary inlets and drains. John J. Wenner is Clerk.

*BEACH CITY, OHIO.—Bids are asked until noon, July 12, by the Council of Beach City for setting stone curb and concrete combined curb and gutter, paving with vitrified paving block on gravel foundation with necessary drainage. Estimated cost of improvement, $13,789. L. E. Chapin, Canton, Ohio, is Engr.

MADISONVILLE, OHIO.—Bids will be received by the Council of the Village of Madisonville, Ohio, until noon, July 13, for furnishing the necessary labor and materials for the improvement of Sherwood Ave., from Bramble Ave. to Arnsby Pl., by grading, rolling, macadamizing roadway. J. A. Conant is Clerk.

CANTON, OHIO.—The contract for the construction of the brick roadway from Canton to Osnaburg was let on June 20 by the County Commissioners. The road will begin at the corporation line on East Tuscarawas St. and will extend to the corporation line at Osnaburg. The brick paving will be 16 ft. wide, leaving a dirt road of 12 ft. Bids were submitted as follows: W. H. Ralston, $39,887.60; SKEELES, CAMPBELL & CORL, $35,551 (awarded contract); W. H. Vogt & Son, $59,403; Burd & Downs, $61,388; Frank Downs, $64,084. The estimated cost of the improvement was $61,382. The contract calls for a completion of the work in one year.

*COLUMBUS, IND.—We are officially advised that the contract for paving Third St. in this city was let by the City Council at the meeting of June 20, to EWING SHIELDS, of Seymour, Ind. The material to be used is Medora vitrified brick, with cement filler; the price to be paid is $1.48 per sq. yd. for that portion of the street outside of the street railway tracks, and $1.98 per sq. yd. for that portion within the street railway tracks. E. A. Cobb is City Clerk.

Bids will be received by J. M. Davis, Audr. of Bartholomew County, until 10 a. m., July 8, for the construction of 8,055 ft. of gravel road in Hawcreek Township.

WASHINGTON, IND.—Bids are asked by Thomas Nugent, Audr. Daviess County, until 10 a. m., July 5, for the construction of a gravel road known as the Meredith Road.

NEWPORT, IND.—Bids are asked by the Commissioners of Vermillion County until 10 a. m., July 11, for the construction of a gravel road in Clinton Township. H. T. Payne is County Audr.

FRANKFORT, IND.—Bids will be received by the Commissioners of Clinton County until 2 p. m., July 8, for the construction of gravel roads. Charles Cromwell is County Audr.

PAOLI, IND.—Bids will be received by the commissioners of Orange County until 2 p. m., July 5, for the construction of the following macadamized roads: Road No. 1, Orangeville and West Baden Road in Orangeville Township, 15,634 ft. in length, and Road No. 1, the Beech Grove Road in Paoli Township, 9,890 ft. in length. Alvin B. Ham is County Audr.

LAPORTE, IND.—Bids will be received by the Commissioners of Laporte County until 10 a. m., July 14, for the construction of 39,520 ft. of macadamized road in Township. C. H. Miller is County Audr.

GRAND RAPIDS, MICH.—CARPENTER & ANDERSON, at $12,964, on June 16, secured the contract for improving South Ottawa St. with brick.

MONMOUTH, ILL.—Bids are asked by the Town Commissioners of Highways until 10 a. m., July 7, for hauling gravel from the mill road track in or near Monmouth and crushed stone from Parker's Quarry, southwest quarter of Section 8, Monmouth Township (including spreading and rolling) to points along line of construction of road.

WAUKEGAN, ILL.—JAMES CAPE & SONS, of Racine, Wis., have been awarded the contract for brick pavements in this city to cost $60,000.

BELOIT, WIS.—We are officially advised that the WESTERN IMPROVEMENT Co. of Racine, Wis., has been awarded the contract for city paving, using brick. Bids were received as follows: Western Improvement Co., Racine, Wis., $66,767; O'Farrell Contracting Co., Dubuque, Iowa $78,051; A. E. Rutledge, Rockford, Ill., $67,909; Federal Improvement Co., Chicago, $68,566. Robert Caldwell is City Engr.

SUPERIOR, WIS.—COLE & WARD, of this city, have been awarded the contract for building the roadway from the city to the U. S. Steel Corporation's plant. Cost, $11,737.

*VINTON, IOWA.—Bids are asked by W. F. Klingman, City Clerk, until 8 p. m., July 11, for 35,000 sq. yds. of brick block pavement with 10,000 cu. yds. of grading and for 11,000 lin. ft. cement curb.

DES MOINES, IOWA.—Bids are asked by the City Council until 9 a. m., July 6 for paving with sheet asphalt consisting of a 1-in. binder course with a 1½-in. wearing surface upon five inches of concrete foundation, Center St., from the west curb line of 16th St. to the east curb line of 18th St.; also from the west curb line of 18th St. to the east curb line of 19th St., about 3,656 sq. yds. of paving, more or less. Work to begin on or before July 16 and to be completed on or before Sept. 1, 1910. James R. Hanna is Mayor.

FORT MADISON, IOWA.—Bids were received as follows on June 16, by the City Council, for paving with vitrified brick block on a concrete foundation, pitch or ash filled joints, about 16,000 sq. yds. L. G. Kiel is City Clk.: Cameron, McManus & Joyce, Keokuk, $2.07 per sq. yd.; Fort Madison & Appanoose Stone Co., $2.16 per sq. yd., and John Downs, $2.03 per sq. yd.

FORT DODGE, IOWA.—We are officially advised that bids were received on June 20, by W. L. Tang, City Clk., for constructing about 29,500 sq. yds. of concrete pavement on 5-in. foundation and 2-in. wearing surface and about 16,200 lin. ft. of curb. The contract has been let to the ST. JAMES TILE MFG. CO., at $1.62 per sq. yd. C. H. Reynold is City Engr.

FAIRMONT, MINN.—Bids will be received until July 12 by H. P. Edwards, County Audr., for graveling roads. Bids will be received also for constructing part of State Road No. 1.

SEWARD, NEB.—Bids will be received until July 6 by M. Gordon, City Clk., for brick block paving. The Consolidated Engineering Co., Engrs., Bee Bldg., Omaha.

DALLAS, TEX.—The City Commission has let the contract for paving Carroll and Reiger Aves. to the TEXAS BITULITHIC CO., at a total cost of about $25,000.

COLEMAN, TEX.—The contract for paving and curbing Commercial Ave., from Court House Sq. to College Ave., has been let to COULSON & DAVIS, of Coleman; crushed stone, concrete and gravel and will be used for paving.

GALVESTON, TEX.—Bids will be received until July 5 by John M. Murch, County Audr., for constructing sidewalks and curbing on Galveston County Sea Wall Boulevard requiring approximately 4,000 sq. yds. of sidewalks and 2,200 lin. ft. of concrete retaining curb, granite, limestone, sandstone or gravel may be used for all concrete work.

EL PASO, TEX.—We are officially advised that the TEXAS BITULITHIC CO., of Dallas, Tex., has been let a contract for 35,358 sq. yds. of bitulithic.

NOWATA, OKLA.—We are officially advised that bids were received by the City Clerk of Nowata on June 13, for constructing 38,442 sq. yds. of brick pavement, together with combined curb and gutter and storm sewers. The contract has been let to the SOUTHWESTERN CONSTRUCTION & PAVING CO. R. K. Sutton is City Engr.; P. C. Thompson is City Clerk.

SEATTLE, WASH.—The Board of Public Works has awarded the following contracts for street improvements to the INDEPENDENT ASPHALT PAVING CO. Seattle Theater Bldg.: James St., $71,471; West 59th St., $33,687; East 38th St., $6,231.

SANTA BARBARA, CAL.—Bids will be received until July 5 by the County Board of Supervisors, at Santa Barbara for constructing the extension of Mountain Drive in District No. 2. C. A. Hunt is Clerk.

PORTERVILLE, CAL.—Bids are asked until about July 18 by Irvin H. Althouse, City Engr., for about ½ mile of sheet asphalt, to be laid at a cost of $25,000.

LOS ANGELES, CAL.—The Board of Public Works has awarded contract to L. N. DAVIS for grading, graveling and constructing cement curb and gutter and vitrified brick gutter in Gardner St., at $12,646; for the same work in Siskiyon St. to L. H. McOWAN, at $3,180; on Jackson Way, to BENJAMIN F. FORD, at $2,136; also to the MARCHILD-GILMORE-WILTON CO., Pacific Electric Bldg., for paving and constructing cement curb and vitrified block gutter in Olive St., at $4,621; also to A. W. BESEMEYER, for grading, graveling and constructing cement curb and gutter in Hillside Ave., at $3,040.

Emil Firth has awarded contract to R. H. McCRAY, 234 West 28th St., for grading and constructing cement curbs and sidewalks, at the Arlington Square Tract, for $17,000.

SANTA MONICA, CAL.—J. D. KNEEN has been awarded a contract for constructing curbs and sidewalks on Nevada St., at 12½ cts. for sidewalks and 31¾ cts. for curbs.

BRAWLEY, CAL.—EARL C. JONES has been awrded a contract at $1,527 for grading the principal streets.

RIVERSIDE, CAL.—A. L. WINTERS has been awarded a contract, at $4,007, for improving Twelfth St. SHULL, TUCKER & CO. have been awarded a contract for improving Cridge St., at $6,074.

MANUFACTURING PLANTS.

(denotes that this work is advertised in Engineering News.)*

MANSFIELD, MASS.—Walter M. Lowney has given a tract of land in the north part of this town to the Dr. Johnson Co., now manufacturing "Educator" crackers in a Boston suburb and the company has agreed to build a factory and operate it under the name of Mansfield Cracker Co. The building will occupy what was the site of the Henry Williams house. The main factory building will be 28 × 100 ft., four stories high, and there will be other smaller buildings. The main structure will be of concrete construction. Work will begin at once, and it is intended to have the place ready for occupancy by October.

FAIRHAVEN, MASS.—It is reported that a $1,000,000 mill will be located on Spooner's Point, North Fairhaven, Mass. Eben C. Wiley, of Fall River, Mass., has received from the Fairhaven Selectmen a 30-day option on the point.

SOUTHINGTON, CONN.—The George E. Wood Tool Co., of Southington, Conn., manufacturers of screw-drivers and hardware, and which is controlled by the Stanley Rule & Level Co., of New Britain, plans to build an additional factory soon.

HARTFORD, CONN.—The Hart Mfg. Co., of Hartford, Conn., makers of electrical switches and supplies, is to erect a factory on Bartholomew Ave. The structure will be 14 stories high, of brick, 60 × 250 ft., and will have 55,000 sq. ft. of floor space. Construction will be completed in October, and then the work done at the branch plant at 156 Pearl St., Boston, will be transferred to Hartford.

COLLEGE POINT (L. I.), N. Y.—The American Hard Rubber Co., 9 Mercer St., New York, N. Y., contemplates erecting a 3-story, 50 × 100-ft. brick building of slow burning mill construction, a 1-story, 20 × 100-ft. fireproof addition, and a 3-story structure to connect new buildings with old plant at College Point.

NEWARK, N. J.—It is reported that the Shiman-Miller Mfg. Co., Murray St., Newark, N. J., contemplates erecting a 5-story, brick addition, 40 × 100 ft., to its plant at Murray and Austin Sts.

CAMDEN, N. J.—Ballinger & Perrot, Archs., 1211 Arch St., Philadelphia, Pa., have awarded a contract to the J. S. ROGERS CO., of Moorestown, for two additional stories to the cabinet factory on the east side of Delaware Ave., between Market and Cooper Sts., Camden, for the Victor Talking Machine Co., making six stories in all. The new stories will have a frontage of 129 ft. and a depth of 194 ft. of reinforced concrete construction and brick walls.

PHILADELPHIA, PA.—At a cost of $25,000, a piano factory and warehouse are to be built for the William Scherren Piano Co. on the site of the present dwellings, 1309 and 1311 Fairmount Ave., and at 1306 and 1308 Olive St., in the rear, covering an area of 36 × 167 ft. The plans are being prepared by Francis G. Caldwell, Arch., 1218 Chestnut St.

TACONY (Philadelphia post-office), PA.—Ground will be broken at once for an addition to the Disston Saw Works, in Tacony. The building, which will be two stories in height, 63 × 181 ft., is designed to enlarge the machine, knife and jobbing department. Work will be started at an early date on an addition to the cold-rolling department. Cost, $500,000.

BALTIMORE, MD.—A factory plant will be established in North Baltimore by Louis Snellenburg & Son as an adjunct to their present business at Baltimore and Liberty Sts. Application has been made for the erection of the plant, which will be at the southeast corner of Aisquith and Oliver Sts., and cost $15,000. It will be three stories high, of brick construction, and will cover a lot 75 ft. 8 ins. by 110 ft. The roof will be of slag. The work will be done by McLAUGHLIN BROS., INC., 915 Bolton St.

SIMPSONVILLE, S. C.—The owners of the Simpsonville Cotton Mills have increased the capital from $150,000 to $500,000 in order to add to its facilities. A contract has been awarded to the GALLIVAN BUILDING CO., of Greenville, S. C., for the erection of two additional warehouses and the new mill building which will be two stories high, 290 ft. long by 132 ft. wide. There will also be built 50 cottages for the operatives. The new machinery will include sufficient equipment to increase the company's complement by 16,896 spindles and 400 looms, which will give it a total of 25,088 spindles and 600 40-in. looms, and electrical drive will be installed for the entire equipment. Joseph E. Sirrine, of Greenville, S. C., is the Arch. and Engr. for the Simpsonville company.

ROANOKE, ALA.—The W. A. Handley Mfg. Co., of Roanoke, will erect an additional building and install 120 looms so that a portion of its yarn output can be woven into cloth. This weaving machinery has been ordered and will be in position in a few weeks. This company is now operating 18,000 ring spindles on yarn production.

NILES, OHIO.—The Gary Iron & Steel Co., has increased its capital from $700,000 to $1,000,000, and will erect a plant at Niles, Ohio, where it recently purchased the plant of the Empire Iron & Steel Co.

GENEVA, OHIO.—The American Fork & Hoe Co. will build an addition to its plant at Geneva. Burchard & Case, Engrs., have prepared the plans for a 4-story factory building and the work will be started at once. The general contract for this building has been awarded to the HUNKINCONKEY CONSTRUCTION CO., of Cleveland.

TOLEDO, OHIO.—The General Electric Co. has taken out a building permit for the extension to its factory, to be erected of brick and cement at Champlain and Mulberry Sts. The addition to the present plant will cost about $160,000, and is to be followed by further improvements in the electric light bulb plant.

EVANSVILLE, IND.—We are officially advised that the Vulcan Steam Shovel Co. has awarded to the ARNOLD CO., 181 La Salle St., Chicago, Ill., the contract to design and construct several fireproof, brick, concrete and steel 1-story buildings. The structures will cover an area of 250,000 sq. ft. and will cost $250,000. The equipment will cost $250,000 also.

PORT HURON, MICH.—George H. Harvey, 201 Huron St., is preparing plans for a brick factory addition, 96 × 112 ft., for the Port Huron Construction Co., 302 Union St. Some machinery will be purchased.

The same architect has let the general contract to A. W. SCHULTZ, 803 Bancroft St., for the 3-story factory, 50 × 80 ft., to be built for the Port Huron Creamery Co., J. F. Huff, Pres. Cost, $15,000.

MILWAUKEE, WIS.—We are officially advised that the Hirschberg-Williams-Washburn Co., Engrs., have prepared plans for a 5-story reinforced-concrete factory building, about 65 × 70 ft., and to cost $25,000, to be built by the Harley-Davidson Motor Co., at Chestnut and 38th Sts. The excavation and concrete work has been let to B. J. DANIELSON, of Milwaukee. The building will be fireproof. Noted on May 19.

LIST OF CONTRACTS PENDING.

Light, Heat and Power Plants.

	Noted in issue of
7- 4 Switches, Winnipeg, Man	6-30
7- 5 Electrical supplies, New York	6-23
7- 6 Franchise, Bodie, Cal	6- 9
7- 6*Steam dist. system, West Point, N. Y	6-23
7- 6*Water-power sta., Sturgis, Mich	6-23
7-11 Elec. equip., New York	6-30
7-11*Heating plants, etc., Atlanta, Ga	6-16
7-12 Engine, Calgary, Alta	6-30
7-12 Franchise, Bakersfield, Cal	6-30
7-13*Hydroelectric plant, Bedford City, Va	6-30
7-16 Generator sets, etc., Charleston, S. C	6-30
7-21 Elec. light fixtures, New York	6-30
7-22 Gas engine, Pierre, S. Dak	6-30

Bridges.

7- 1 Bridge, Spokane, Wash	6-30
7- 2 Bridge, Washington C. H., Ohio	6-16
7- 4 Superstructure, Ottawa, Ont	6-30
7- 5 Bridges, Greenfield, Ind	6-30
7- 5 Bridge, Martinsville, Ind	6-30
7- 5 Bridges, Albion, Ind	6-30
7- 5 Bridge, Crown Point, Ind	6-30
7- 5 Bridges, Richmond, Ind	6-30
7- 5 Bridge, West Palm Beach, Fla	6-30
7- 5 Bridge, Ebensburg, Pa	6-30
7- 5 Bridges, Arcadia, Tex	6-16
7- 5 Bridge, Stevenson, Wash	5-12
7- 5 Bridges, Richmond, Ind	6-23
7- 5 Bridge, Lawrenceburg, Ind	6-23
7- 5 Trestle, West Point, Miss	6-23
7- 6 Bridge, San Luis Obispo, Cal	6-23
7- 6 Bridges, Metz, Cal	5-26
7- 6 Bridge, Templeton, Cal	6- 9
7- 6 Bridges, Council Grove, Kan	6- 9
7- 6 Bridges, Frankfort, Ind	6-30
7- 6 Bridge repair, Peru, Ind	6-30
7- 7 Bridges, San Rafael, Cal	6-30
7- 7 Bridge, Mt. Gilead, Ohio	6-30
7- 7 Bridges, Indiana, Pa	6-30
7- 7 Bridge, Oil City, Pa	6-16
7- 8 Bridges, Bluffton, Ind	6-30
7- 8 Bridges, Lebanon, Ind	6-30
7- 9*Bridge, Huron, Ohio	6- 9
7-11 Bridges, Fort Benton, Mont	6-30
7-12 Bridges, etc., Visalia, Cal	6-30
7-12*Bridge, Hummelstown, Pa	6-30
7-13 Bridge work, Cleveland, Ohio	6-23
7-14 Substructure, etc., Columbus, Ohio	6-23
7-16 Bridge, Jeffersonville, Ind	6-16
7-17 Bridge, Pocatello, Idaho	6-30
7-18*Bridge, Columbus, Ga	6-16
7-20*Bridge, Greenville, S. C	6-30
7-20 Bridges, Somerset, Pa	6-30
7-23 Superstructure, Solon, Me	6-30
7-25 Bridges, Leesburg, Va	5-26
7-28 Bridge work, Alexandria, La	6-16
9- 1 Bridge superstructure, Quebec	6-30

Buildings.

7- 1 Post-office, Jeffersonville, Ind	6- 2
7- 1 Pavilion, New York	6-23
7- 2 School, New Haven, Conn	6-30
7- 5 Foundation, Evansville, Ind	6-23
7- 5*Post-office, Troy, Ala	6- 9
7- 5 Schools, Indianapolis, Ind	6-30
7- 5 School, New York	6-23
7- 6 School, Columbus, Ohio	6-23
7- 7*Shacks, Glen Gardner, N. J	6-23
7- 7 Post-office, Beloit, Wis	6- 9
7- 8 Sanatorium, New York	6-30
7-11 Court-house, Greenville, N. C	6-30
7-11 Schools, New York	6-30
7-11 School, Ft. Wayne, Ind	6-30
7-11 Hospital, St. Paul, Minn	6-30
7-11*Post-office, Columbus, Neb	6- 2
7-12 Quarters, San Francisco, Cal	6- 9
7-12 School, Indianapolis, Ind	6-30
7-13 Barn, etc., Indianapolis, Ind	6-30
7-14 School, Crawfordsville, Ind	6-30
7-18*Post-office, Demopolis, Ala	6- 9
7-18 School, Cleveland, Ohio	6-30
7-18*Hospital, Ft. Monroe, Va	6-30
7-21 Court-house, Brookville, Ind	6-30
7-26 Cabinet work, Peru, Ind	6-30
7-26 Quarters, Louisville, Ky	6-16
7-27*Post-office, Lewiston, Idaho	6-16
7-27*Dwellings, Cincinnati, Ohio	6-30
8- 1*Post-office, Santa Cruz, Cal	6-23
8- 3*Post-office, Litchfield, Ill	6-30
8-23 Buildings, etc., Hawaii	6- 9
9-10 Plans, Albany, N. Y	6- 9
11- 1 Plans, Toronto, Ont	6- 9

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7- 1 Steel pipe, Los Angeles, Cal	5-26
7- 1 Water lines, Olean, N. Y	6-23
7- 1 Reservoir, Clinton, Wis	6-30
7- 1 Water-works, Belfast, N. Y	6-30
7- 2 Reservoir, Denver, Colo	6-23
7- 2 Well, Louisa, Va	6-23
7- 5 Water main, Fort Mason, Cal	6-23
7- 5 C.-I. pipe, Muskogee, Okla	6-23
7- 5 Reservoir, etc., Albion, Pa	6-23
7- 5 Water main, Spooner, Wis	6-30
7- 5 Water main, Harvard, Ill	6-30
7- 6 Pipe, San Francisco, Cal	6-30
7- 6 Meters, New York	6-23
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7- 6 Water mains, New York	6-16
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7- 7 Water conduit, Grand Rapids, Mich	6-30
7- 8 Canal enlargement, Boise, Idaho	5-19
7- 8*Standpipe, Waynesboro, Va	6-16
7-11 Well, Corydon, Iowa	6-16
7-11 Pumping plant, Livonia, N. Y	6-30
7-11*Water system, Pike, N. Y	6-30
7-13 Water-works supplies, New York	6-30
7-13 Water-works, Sultan, Wash	6-30
7-13 Pump house repairs, Brooklyn, N. Y	6-30
7-14*Steel tank, Pittsburg, Pa	6-30
7-15*Steam and water pipes, Atlantic City, N. J	6-30
7-15*Pumping plant, Carrollton, Ill	6-23
7-18*Dam, Boulder, Colo	6-23
7-19 Coagulating basins, Atlanta, Ga	6-30
7-20*Dam, etc., Fort Meade, S. Dak	6-30
7-21*Pumping machinery, Grand Rapids, Mich	6-30
7-22*Pumping plant, Carrollton, Ill	6-30

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7- 1 Sewers, North Braddock, Pa	6-23
7- 1 Sewer, Portland, Me	6-16
7- 1 Sewage plant, West View, Pa	6- 9
7- 4 Disposal plant, Rome, N. Y	6-30
7- 5 Sewer, Beech Grove, Ind	6-30
7- 5 Sewer, Albany, N. Y	6-30
7- 5 Sewer, Oklahoma City, Okla	6-30
7- 5 Sewer system, Belton, Tex	6-30
7- 5 Sewer, Grand Forks, N. Dak	6-30
7- 5 Sewers, Omaha, Neb	6-30
7- 5 Sewering, Wooster, Ohio	6-30
7- 5*Sewer, Waverly, Iowa	6-30
7- 5*Sewer, Plainfield, N. J	6-16
7- 5 Sewer system, Hugo, Okla	6-16
7- 6 Sewers, Struthers, Ohio	6-16
7- 6 Sewer, etc., Pella, Iowa	6-16
7- 6*Sewer system, Iowa Falls, Iowa	6-23
7- 6*Sewer, Attleboro, Mass	6-23
7- 6 Sewers, Brooklyn, N. Y	6-23
7- 6 Sewers, New York	6-23
7- 6 Sewers, Putnam, Conn	6-30
7- 6 Sewers, San Francisco, Cal	6-30
7- 6 Sewers, Des Moines, Iowa	6-30
7- 6 Sewer system, Hancock, Md	6-30
7- 6 Sewers, New York	6-30
7- 7 Sewer, Carterville, Mo	6-30
7- 7 Sewer system, Tracy, Minn	6-30
7- 7 Vitrified pipe, Munising, Mich	6-16
7- 7 Sewers, Fort Warren, Mass	6-16
7- 8*Disposal plant, etc., Norristown, Pa	6-23
7- 8 Sewer, Louisville, Ky	6-30
7- 9 Drain, Boston, Mass	6-16
7-11*Sewage tank, Charleston, S. C	6-16
7-11*Sewer system, Sandpoint, Idaho	6-23
7-11 Sewer, Winona, Minn	6-30
7-12 Sewers, Leon, Iowa	6-30
7-12 Sewers, New Brighton, N. Y	6-30
7-12 Tile pipe, Swift Current, Sask	6-30
7-12 Sewer system, Herington, Kan	6-30
7-12 Sewer fittings, etc., Atlanta, Ga	6-23
7-12 Sewers, Sabetha, Kan	6-16
7-13 Repair of sewer, Brooklyn, N. Y	6-30
7-14 Sewer, New York	6-30
7-15 Sewer, Elizabeth, N. J	6-30
7-18 Sewer, Minerva, Ohio	6-30
7-18*Sewers, Westfield, N. J	6-30
7-20*Sewer, etc., Phila., Pa	6-30
7-25 Drain, Savannah, Ga	6-23
7-26*Sewer, Toronto, Ont	6-30
7-27*Sanitary sewers, Union City, Tenn	6-30

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7- 1 Roads, Concord, N. H	6-23
7- 1 Roads, Hartford, Conn	6-30
7- 5 Sidewalks, etc., Galveston, Tex	6-30
7- 5 Roads, Paoli, Ind	6-30
7- 5 Road, Washington, Ind	6-30
7- 5 Paving, Wooster, Ohio	6-30
7- 5 Paving, Sewickley, Pa	6-30
7- 5 Road, Indiana	6-23
7- 5 Road, Mount Holly, N. J	6-23
7- 5 Paving, Schuylkill Haven, Pa	6-23
7- 5 Road, Rushville, Ind	6-16
7- 5 Roads, Princeton, Ind	6-16
7- 5 Roads, Greencastle, Ind	6-16
7- 5 Roads, Danville, Ind	6-16
7- 5 Roads, Tipton, Ind	6-16
7- 5*Road, Burlington, N. J	6-16
7- 6 Road, Muncie, Ind	6-16
7- 6 Road, Logansport, Ind	6-16
7- 6 Paving, etc., Canton, Ohio	6-16
7- 6 Paving, Canton, Ohio	6-23
7- 6 Road, Indiana	6-28
7- 6 Paving, etc., New York	6-23
7- 6 Paving, Seward, Neb	6-30
7- 6 Paving, Des Moines, Ia	6-30
7- 6 Macadam, Cincinnati, Ohio	6-30
7- 6 Road, Mansfield, Ohio	6-30
7- 6 Road, Tupelo, Miss	6-30
7- 6 Highway, Baltimore, Md	6-30
7- 6 Macadam, New York	6-30
7- 7 Road stone, Monmouth, Ill	6-30
7- 7 Road, Lisbon, Ohio	6-30
7- 7 Paving, Louisville, Ky	6-30
7- 7 Paving, Shenandoah, Pa	6-30
7- 7 Asphalt, New York	6-30
7- 7 Paving, etc., New York	6-30
7- 7 Road, Indiana	6-23
7- 7*Macadam, Glen Gardner, N. J	6-23
7- 8 Road, Indiana	6-23
7- 8 Roads, Concord, N. H	6-23
7- 8 Sidewalks, etc., Hoosick Falls, N. Y	6-23
7- 8 Macadam, Flemington, N. J	6-23
7- 8 Road, Frankfort, Ind	6-30
7- 8 Road, Columbus, Ind	6-30
7- 8 Pike, Findlay, Ohio	6-30
7- 8 Road, Wooster, Ohio	6-30
7- 9*Paving, Washington, D. C	6-23
7- 9 Paving, Charleston, S. C	6-16
7-11*Paving, Waukesha, Wis	6-16
7-11 Road, Indiana	6-23
7-11*Paving, Newark, N. J	6-23
7-11*Paving, etc., Vinton, Ia	6-30
7-11 Road, Newport, Ind	6-30
7-11 Road, Hartford, Conn	6-30
7-12 Roads, Fairmont, Minn	6-30
7-12 Paving, Lake City, Fla	6-23
7-12 Roads, etc., Ft. Slocum, N. Y	6-23
7-12*Paving, Beach City, Ohio	6-30
7-13 Macadam, Madisonville, Ohio	6-30
7-13*Roads, Freehold, N. J	6-30
7-14 Macadam, Laporte, Ind	6-30
7-14 Paving, Sandusky, Ohio	6-30
7-14 Road, Towson, Md	6-30
7-14 Road, Baltimore, Md	6-23
7-15 Road, Cincinnati, Ohio	6-30
7-20 Paving, Struthers, Ohio	6-30

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7- 1 Revetment, Memphis, Tenn	6-16
7- 1 Drain tile, Raymond, Ill	6-30
7- 1 Dredging, Boston, Mass	6-30
7- 2 Ditch, tile, Mansfield, Ill	6-30
7- 2 Ditch, Frankfort, Ind	6-30
7- 2 Ditch, Hampton, Ill	6-16
7- 2 Crane, Vallejo, Cal	6-16
7- 5 Wharf, Levis, Que	6-16
7- 5*Channel impvts., Cleveland, Miss.	6-16
7- 5*Drainage system, Greenwood, Miss	6-23
7- 5*Wharf, Richmond, Va	6-23
7- 5 Steel fence, Albany, N. Y	6-30
7- 5 Conduits, New Britain, Conn	6-30
7- 5*Dredging, Bayonne, N. J	6-30
7- 7 Wall, Rahway, N. J	6-30
7- 8 Surveying, etc., Belle Vernon, Pa	6-30
7- 8 Steel bars, Atlanta, Ga	6-23
7- 9 Drain, Boston, Mass	6-23
7- 9 Ditch, Anderson, Ind	6-30
7- 9 Ditch, Hallock, Minn	6-30
7-12 Insulation, New York, N. Y	6-30
7-12 Naval supplies, Washington, D. C.	6-30
7-12 Light-house supplies, Tompkinsville, N. Y	6-23
7-14*Metal shelving, San Francisco	6- 9
7-15 Metal shelving, Atlanta, Ga	6-16
7-15 Drainage, Waco, Neb	6-16
7-15*Ditches, Helena, Ark	6-30
7-15 Railway grading, Berlin, Ont. (Elec. Rys.)	6-30
7-18 Air lift system, stone, Moose Jaw, Sask	6-30
7-19*Barge canal, Albany, N. Y	6-23
7-19 Dredging, Trenton, N. J	6-23
7-20 Dredge, Vancouver, B. C	6-16
7-22*Removing rock, gravel, etc., New York, N. Y	6-23
7-25 Trinitrotoluol, Ft. Totten, N. Y	6- 9
7-25*Dams and canal, Porto Rico	5-12
8- 8*Ry. grading and bridges, El Paso, Tex	6-30

Examinations.

7- 8 Electrician, New York, N. Y	6- 2
7-13 Junior Engineer, Wash., D. C	6- 2
7-13 Asst. Engr., Wash., D. C	6- 2
7-13 Examiner, Klamath Falls, Ore	5-12
7-27 Asst. Chemist, Wash., D. C	6-23
7-27 Laboratory Aid, Wash., D. C	6-23
No date. Asst. Engr., Cambridge, Mass.	6-23

Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file (for reference only unless otherwise noted) at the office of The Engineering News Publishing Co., 220 Broadway, New York.

7- 1 Sewers, Jefferson, Ohio	(S.) 6- 9
7- 2 Crane, Vallejo, Cal	(S.) 6-16
7- 5 Reservoir, etc., Albion, Pa	(S.) 6-23
7- 5*Channel improvements, Cleveland, Miss	(P. & S.) 6-16
7- 6*Water-power sta., Sturgis, Mich	(P & S) 6-23
7- 8*Standpipe, Waynesboro, Va	(S.) 6-16
7- 8 Canal enlargement, Boise, Iowa	P. & S.) 5-19
7- 9 Drain, Boston, Mass	(S.) 6-16
7- 9 Paving, Charleston, S. C	(S.) 6-16
7-12 Sewer fittings, etc., Atlanta, Ga	(S.) 6-23
7-12*Bridge, Hummelstown, Pa	(P & S) 6-30
7-16 Generator set, etc., Charleston, S.	
7-25*Dams, canal, Porto Rico	(P. & S.) 5-12
C	(S) 6-30

DETROIT, MICH.—J. C. Stahl, Jr., Detroit Gas Co. Bldg., has prepared plans and specifications for a creamery building, two stories and basement, 51 x 86 ft., for Tower's Wayne County Creamery Co., William J. Kennedy, Secy., 73 Bagely Ave. Construction is to be of press and stock brick, Bedford stone, terra cotta, with composition roof, galvanized iron skylight and cornices, structural iron, hardwood finish and floors, granolithic tiling and electric fixtures. Cost, $20,000.

Albert Kahn and E. Wilby, Trussed Concrete Bldg., let the general contract on June 7 for the factory addition of the Burroughs Adding Machine Co., Second Ave. and Amsterdam St., to the STERLING ENGINEERING CO., Caswell Block, Milwaukee, Wis.

Albert Kahn and E. Wilby, Trussed Concrete Bldg., have let the general contract for the factory building for the Ford Service Co. to the STERLING ENGINEERING CO., Caswell Block, Milwaukee, Wis.

Donaldson & Meier, Penobscot Bldg., have let the following contracts for the proposed laboratory for Parke, Davis & Co., E. G. Swift, Gen. Mgr., Atwater St. and Joseph Campau Ave.: Structural iron work to RUSSELL WHEEL & FOUNDRY CO., Joseph Campau Ave. and M. C. R. R.; masonry, to A. A. ALBRECHT CO., Penobscot Bldg.; carpentry, to VINTON CO., 120 Woodbridge St.

SAN BERNARDINO, CAL.—The SECURITY CONSTRUCTION CO., Story Bldg., Los Angeles, has been awarded the contract by the Atchison, Topeka & Santa Fe Ry. Co. for the construction of the railroad shops to be erected here. The building will be 510 x 150 ft. Cost, $80,000. The brick and masonry work will be done by C. A. FELLOWS, Central Bldg., Los Angeles. The building will have steel frame, brick walls, composition roof, concrete and wood block floors, work pits, traveling cranes, etc.

LOS ANGELES, CAL.—F. Maeder, 1669 North Vermont Ave., has awarded a contract to G. H. SMITH, 1139 West 18th St., for the erection of a 4-story brick factory building, 70 x 112 ft., with concrete foundation, asbestos roof, freight and passenger elevators, and fire escapes. Cost, $26,570.

MISCELLANEOUS CONTRACTS.

(* *denotes that this work is advertised in (Engineering News.)*

U. S. RECLAMATION SERVICE.—All news concerning canal and irrigation projects, etc., will be found under Water Supply—Irrigation.

DITCH.—Frankfort, Ind.—Bids will be received until July 2 by M. V. Unger, Drainage Comr., for constructing the Chas. H. Michael Ditch, known as Cause No. 17933.

DITCH.—Elk Point, S. Dak.—The Board of County Commissioners on June 14 awarded contract for the construction of the Dennison ditch to the SHERWOOD DREDGING CO., of Alexandria, Minn., for 14¼ cts. per cu. yd., for about 45,000 cu. yds.

DITCH.—Anderson, Ind.—Bids will be received until July 9 by B. Dille, Drainage Comr., for constructing seven miles of the Taylor ditch in Anderson, requiring 6-in. to 30-in. concrete tile. Cost, about $17,000. A. I. Smith is County Engr., Anderson.

*DITCHES.—Helena, Ark.—Bids will be received until noon, July 15, by the Board of Directors of the Yellow Banks Drainage District for the construction of two drainage ditches, about 700,000 cu. yds. excavation, in Phillips County, Ark. E. M. Allen, Secy.

DRAIN TILE.—Raymond, Ill.—Bids will be received until July 1 by the Commissioners of Union Drainage Dist. No. 1, towns of Raymond and Harvel, care of L. L. Potts, Town Clk., Raymond, for furnishing, hauling and laying drain tile. J. W. Dappert, Engr., Taylorville, Ill.

INSULATION.—New York, N. Y.—Bids will be received until 11 a. m., July 12, by the Department of Corrections for furnishing all the labor and materials required to apply new covering insulation to all the pipe lines, fittings, valves, traps, etc., in the new steam subway on Hart's Island, New York.

NAVAL SUPPLIES.—Washington, D. C.—Bids will be received until July 12 at the Bureau of Supplies and Accounts, Navy Dept., for the following supplies: 192 bbls. Portland cement, at Washington; 7,000 lbs. copper pipe, Brooklyn; 2,000 ft. air hose, at Norfolk, Va.

STEEL FENCE.—Albany, N. Y.—Bids are asked by the Board of Contract and Supply until 3 p. m., July 5, for constructing a steel fence with concrete posts on the grounds of the Albany Water-Works at Bleecker Reservoir. Walter Melius is City Engr.

*DREDGING.—Bayonne, N. J.—Bids will be received until 8 p. m., July 5, by City Council for all the labor and material required for dredging under water at 25th St. Dock in Newark Bay. There will be required about 7,000 cu. yds. of dredging. Wm. C. Hamilton, City Clerk.

DITCH, TILE.—Mansfield, Ill.—Bids will be received until July 2 by the Commissioners of Newcomb Special Drainage District, Champaign and Piatt Counties, Alvin James, Chn., Mansfield, for work and furnishing tile in subdistricts Nos. 1, 2, 3 and 4; also for excavating main open ditch in said districts.

DITCH.—Caribou, Minn.—Bids were received on June 20 by C. J. Hemmingson, at Hallock, for constructing County Ditch No. 18 at Caribou. Estimated cost, $13,072. J. E. Dishington, Engr., Warren, Minn. Contract was awarded to G. E. BROWN, Litchfield, Minn., at 12 cts. per cu. yd., including road leveling.

AIR-LIFT SYSTEM, STONE.—Moose Jaw, Sask.—Bids will be received until 8 p. m., July 18, by W. F. Heal, City Clerk, for Contract "B,"(1) supplying and installing a complete air-lift system, (2) supplying and installing one electrically-driven centrifugal pump and auto starter; Contract "C," supplying and delivering 3,000 cords of field stone. J. M. Wilson, City Engr.

DITCH.—Ft. Dodge, Iowa.—Bids received on June 23 by the joint Board of Supervisors, Wright and Webster Counties, at Ft. Dodge, for furnishing material and constructing ditch No. 46, Wright County and ditch No. 92, Webster County (requiring 3,700 ft. 20-in. tile and 700 ft. 24-in. tile), were rejected. J. L. Hanrahan is Audr. Webster County, at Ft. Dodge.

DREDGING.—Boston, Mass.—Bids will be received until 2 p. m., July 1, by the Board of Land Commissioners, Frank W. Hodgdon, Ch. Engr., State House, Boston, for dredging the south channel of Mystic River in Boston Harbor. The work to be done is the dredging of about 115,000 cu. yds., scow measurement, of material to make the channel 20 feet deep at mean low water.

DITCH.—Des Moines, Iowa.—Bids were received on June 20 by the Board of County Supervisors for the excavation and construction of drainage ditch located in Drainage District No. 11 in Elkhart Township. About 53,471 cu. yds. of earth are to be excavated and removed. H. B. Frase, County Audr. Contract was let to O. P. HERRICK, Observatory Bldg., Des Moines, at 16.49 cts. per cu. yd.

WALL.—Rahway, N. J.—Bids will be received until July 7 by Frank Moore, Supt. New Jersey Reformatory, for furnishing and delivering f. o. b. about 135,000 lbs. of rods, 5,000 tons ¾-in. crushed rock (trap or granite), 2,150 tons clean, sharp sand, and 4,700 bbls. concrete (Portland), in cotton, to be used in the construction of a concrete wall. Bids were asked until May 27, as noted on May 19.

*RAILWAY GRADING AND BRIDGES.—El Paso, Tex.—Bids will be received until 2 p. m., Aug. 8, at the office of the United States Reclamation Service, Room 15, Chamber of Commerce Bldg., El Paso, Tex., for constructing the roadbed, bridges and culverts for a branch railway from the A., T. & S. Ry., at a point between Engle, N. Mex., and Cutter, N. Mex., to the Engle dam site, near Elephant Butte, N. Mex., a distance of about 10 miles. The work involves the excavation of about 14,000 yds. of earth, 56,000 yds. of rock, and the placing of approximately 400,000 ft. B. M. of timber.

DITCH.—Hallock, Minn.—Bids will be received by C. J. Hemmingson and A. G. Lundgren, County Auditors of Kittson and Marshall Counties, at Hallock, Minn., until 1 p. m., July 9, for constructing Judicial Ditch No. 10, between the two counties: about 20 miles long, average depth about 5 ft., bottom width 3 to 8 ft., slope 1½ to 1, 381,508 cu. yds., clear open prairie, soil black loam, nearest railway station, Donaldson, two miles north of ditch, crosses Great Northern Ry. Estimated cost, $62,957. O. L. Hamery, Crookston, Minn., is Engr. Noted on June 9.

SURVEYING, ETC.—Belle Vernon, Pa.—Proposals will be received until 7 p. m., July 8, for surveying the streets and alleys of the Borough of North Belle Vernon, Pa.; to locate and set monuments, where necessary, for the purpose of locating the center lines of streets of Borough and the width thereof, and also to survey and give grades of streets in said borough where not now fixed by ordinance; monuments to be sawed marble 6 ins. × 6 ins. × 24 ins.; map and blue prints showing streets, alleys, monuments, water lines, fire hydrants, sewer and lot numbers. T. R. Todd, Secy., Belle Vernon.

DRAINAGE DITCH.—Wheaton, Ill.—Bids were received as follows on June 20 by the City Clerk for deepening and widening the South Side drainage ditch for a distance of 6,000 ft. below the septic tank, to be 8 ft. wide on bottom, and 1 ft. to 1 ft. slope, about 12,000 cu. yds.: McAllister & Peterson, Zion City, Ill., $2,550; A. Bennema, 303 West 111th Pl., Chicago, $3,850; American Engineering & Construction Co., Chicago, $4,440; Stephens Construction Co., Chicago, $4,649; Joseph Lewis, Attwood, Ill., $4,950; Horton & Mosely, Fort Wayne, Ill., $7,500. A. L. Webster is City Engr.

DREDGING.—Lorain, Ohio.—Bids were received on June 21 by the Board of Public Service, as a whole or separately, for dredging in Black River, about 100,000 cu. yds. Also for making fill on city property east of Black River and north of Erie Ave. viaduct, about 15,000 cu. yds. Contract for both dredging and filling was awarded to G. H. BREYMAN & BRO., 5 Marin Bldg., Toledo, as follows: Dredging, mud, 100,000 cu. yds., 11 cts. per cu. yd.; logging, $20 per hour for ten hours; dredging, shale, 500 cu. yds., $1 per cu. yd.; filling swamp land, 15,000 cu. yds., with centrifugal pump, 35 cts. per cu. yd.

DRAINAGE.—Lockport, La.—C. A. McWILLIAMS, of Walnut, Ill., has completed negotiations for a contract to reclaim 50,000 acres of wet prairie land in Terra Bonne and La Fourche Parishes in Louisiana, a short distance south of Lockport. This land is owned by the New Orleans Delta Drainage Co. and the reclamation is being financed by Trowbridge & Niver Co., 111 Broadway, New York. This is the largest drainage or reclamation contract ever let in southern Louisiana, it is reported. It involves the excavation of more than 9,000,000 cu. yds. of earth; the building of 120 miles of commercial or navigable canals, 120 miles of protection levees and 140 miles of interior drainage or reservoir canals.

BREAKWATER.—Newport, R. I.—Bids were received on June 23 by Lieut.-Col. J. C. Sanford, Corps Engrs., U. S. A., for repairing breakwater at Sakonnet Harbor, R. I., as follows: (A) Furnishing and placing 1,500 tons stone (per ton of 2,000 lbs.); (B) furnishing lighter; (C) total. J. C. Terry, Fall River, Mass., (A) $4, (B) $5 per hour, (C) $6,600; E. S. Belden & Sons, Hartford, Conn., (A) $1.63, (B) $6 per hour, (C) $3,165; The Breakwater Co., Philadelphia, Pa., (A) $2.43, (B) $50 per day, of 8 hours; (C) $4,395; U. S. Drainage & Irrigation Co., New York City, (A) $3.77, (B) $7 per hour, (C) $6,495; the Estate of John Beattie, Leetes Island, Conn., (A) $1.65, (B) $7 per hour, (C) $3,315.

DAM.—Oklahoma City, Okla.—Contract for the construction of the spillway of the dam for the lake in Northeast Park has been let by the Board of Park Commissioners to the ILLINOIS CONCRETE MACHINERY CO., of Buda, Ill., for $8,300. The contract stipulates that the company use its own steel forms in the construction of the spillway. When the commissioners first advertised for bids, only three were received, the lowest being $13,465, and the highest was $15,947. The engineer's estimate had been $9,200. Endeavoring to save taxation and reduce the cost of the spillway, all bids were rejected by the commissioners, and re-advertisement was ordered. The bid of the Illinois company was received on the second call, and $5,130 was saved in the transaction.

BARGE CANAL.—Albany, N. Y.—The State Canal Board at its meeting on June 25 approved the following contracts for Barge Canal construction work: Contract No. 22 providing for the construction of new highway bridges and raising existing highway bridges over the Erie Canal between Cold Spring and Free bridges, within the site of Contract No. 12, in Onondaga County, estimated cost $107,126; Contract No. 50, revised plans, for the construction of the reservoir and dam on West Canada creek at Hinckley, area of proposed reservoir being about six sq. miles; estimated cost, $1,076,000; and Contract No. 67, providing for the construction of the prism of the canal with two locks and all other structures at Lockport, not including machinery for operating locks, estimated cost being $1,290,880. The two locks provided in the last named contract are to take the place of the present five combined locks at Lockport. Bids will be asked on the work within two or three weeks by F. C. Stevens, Supt. Public Works.

For other Proposal Advertisements see pages 51, 52, 53, 54, 56, of Advertisements and Construction News page 286.

INTERCEPTOR.

Toronto, Ont.

Sealed tenders addressed to the Chairman of the Board of Control, City Hall, Toronto, Canada, endorsed "Tender for Section No. 6, High Level Interceptor" will be received by registered post only, until noon of Tuesday, July 26, 1910.

The sewer consists approximately of 1,340 linear feet of reinforced concrete pipe sewer, 5 feet internal diameter, extending from Defoe Street at Stanley Park in a northerly direction to a point about 500 feet north of Queen Street.

Specifications may be obtained from, and original drawings will be on file and can be seen at the Main Drainage Department, City Engineers' Office.

For the convenience of contractors, sets of blue prints have been prepared and will be issued to contractors upon the deposit of $5.00, which amount will be refunded upon return of blue prints in good condition within thirty days of receiving tenders.

The usual conditions relating to tenders as prescribed by City By-law must be strictly complied with or the tender will not be entertained.

The lowest or any tender not necessarily accepted.

G. R. GEARY (Mayor),
Chairman, Board of Control.
City Hall, Toronto, June 22, 1910.

RESERVOIR.

Pittsburg, Pa., June 27, 1910.

Sealed proposals, addressed to the Board of Prison Inspectors of the Western Penitentiary of Pennsylvania, Pittsburg, Pa., made on forms furnished as specified below, enclosed in envelope marked "Proposal for Water Reservoir," and enclosed in envelope addressed to the undersigned, will be received at the office of the Warden up to 12:00 noon of July 14th, 1910, for the construction of a steel tank of from 125,000 to 130,000 gallons capacity on tower 100 ft. high.

Plans, specifications and forms for bidding may be obtained from Samuel E. Duff, Consulting Engineer, 706 Empire Building, Pittsburg, Pa. A certified check for $500.00 will be required with all proposals as a guarantee that bidder will execute proper contract if notified on or before July 28th, 1910, of the acceptance of his proposal.

The Board reserves the right to reject any or all proposals.

By order of the Board of Inspectors of the Western Penitentiary of Pennsylvania.

JOHN FRANCIES, Warden.

SEWER, BRIDGE, ETC.

DEPARTMENT OF PUBLIC WORKS
Bureau of Surveys.
Office, 412 City Hall.
Philadelphia, June 27, 1910.

Sealed proposals, endorsed "Bids for "Main Sewer," "Widening Delaware Avenue," "Pennypack Creek Sewage Disposal Works" and "Bridge," and addressed to the undersigned, at the office above mentioned, will be received until 12 o'clock noon, on Wednesday, July 20, 1910, for

Schedule A. Main Sewer.

Pennypack Creek, Intercepting Sewer adjacent to Pennypack Creek, between Delaware River and Frankford Avenue.

Schedule "B," Widening Delaware Avenue.

Sewer construction and other work incident to the widening of Delaware Avenue from Vine Street to Fairmount Avenue.

Schedule "C," Pennypack Creek Sewage Disposal Works.

Pumps, Engines, Gas Producers and accessories.

Pumping Station and Operating House.

Sewage Disposal Works, Cast Iron Force Main and accessories.

Schedule "D," Bridge.

Substructure of seven track railroad bridge over "N" Street under Connecting Railway, consisting of concrete abutments and column piers, and grading and paving of street.

Plans for the above work will be exhibited in the office of Bureau of Surveys, Philadelphia.

Specifications and blank forms upon which bids must be made, will be furnished upon application to the Chief Engineer, Room 416 City Hall.

Bidders must be skilled and regularly engaged in the class of work bid for.

No bid will be considered unless accompanied by a certificate from the City Solicitor, that the provisions of an ordinance requiring proposal bonds when the bids exceed in amount five hundred dollars, approved May 25, 1860 (p. 81, West), have been complied with.

The Director reserves to himself the right to reject any or all bids, as he may deem best for the interests of the city.

GEO. R. STEARNS,
Director.

RAILWAY GRADING AND BRIDGES.—Department of the Interior, United States Reclamation Service, Washington, D. C., June 25, 1910.—Sealed proposals will be received at the office of the United States Reclamation Service, Room 15, Chamber of Commerce Building, El Paso, Texas, until 2 o'clock P. M., August 8, 1910, for constructing the road bed, bridges and culverts for a branch railway from the A., T. & S. Ry., at a point between Engle, N. M., and Cutter, N. M., to the Engle dam site, near Elephant Butte, N. M., a distance of about 10 miles. The work involves the excavation of about 14,000 yds. of earth, 56,000 yds. of rock, and the placing of approximately 400,000 ft. B. M. of timber. Further particulars may be obtained from the office of the United States Reclamation Service, Washington, D. C., El Paso, Texas or Elephant Butte (near Engle), N. M. R. A. BALLINGER, Secretary.

Situations Open

WANTED—Competent bridge draftsman with theoretical knowledge of stresses; some knowledge of reinforced concrete preferred. Location, Portsmouth, Va. Give full details of experience, age, nationality, salary expected, etc. Address "S. A. 26," Engineering News, New York. 26-2t

GRADUATE ENGINEER, who has had some practical experience, for general survey work. Must be a ready and accurate computer and able to do both inside and outside work. JOHN M. FARLEY, White Plains, N. Y. 26-1t

DRAFTSMAN who can do plotting from field notes and make neat tracings, well formed figures and letters. Only an exceptionally good tracer need apply. JOHN M. FARLEY, White Plains, N. Y. 26-1t

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Alphabetical Index of Advertisers, Page 39

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Parts for all makes of crushers
JAWS, CHEEKS, TOGGLES and BEARINGS
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PROCESSES OF MANUFACTURE—RESEARCH
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High Tensile Strength — Finely Ground
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"The largest and best ever built anywhere"
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Vertical Triple Expansion and Horizontal Compound
THE WILLIAM TOD COMPANY, Youngstown, Ohio

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VITRIFIED GLAZED CLAY SEWER PIPE
ALL SIZES — WRITE US NOW
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An Acceptable Substitute
For BRICK and CONCRETE SEWERS
Large Sizes VITRIFIED PIPE
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YOU know pipe—but do you know our pipe: vitrified pipe—pipe that's different; different and better? Let us tell you about this; and the new prices.
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Superior Vitrified Sewer Pipe — Double Strength Extra Thick Culvert Pipe

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IT IS THE BEST RUST-RESISTING IRON MADE
KNOWLEDGE IS POWER. WRITE FOR FULL INFORMATION.
THE AMERICAN ROLLING MILL CO.
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LICENSED UNDER INTERNATIONAL METAL PRODUCTS CO.'S PATENTS

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SYMONS CRUSHERS
See our advertisement on page 61

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CORLISS Engines, Boilers
Heavy Machinery Constructed
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are hourly kept from encrusting boiler tubes by our water softeners
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CHEMISTS ENGINEERS MANUFACTURERS

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"PIONEER" ASPHALTS
used with unqualified success since 1896
See our advertisement on page 18
THE AMERICAN ASPHALTUM & RUBBER CO.
600-614 Harvester Building, Chicago

GOODRICH
CONVEYOR BELT
Improved Method of Construction.
Write for special literature.
The B. F. Goodrich Company, Akron, Ohio
See our advertisement on page 66 last issue

Will Furnish and Erect in United States and Foreign Countries
Wooden Stave Pipe
EXCELSIOR WOODEN PIPE CO.
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Advertisement is on page 15

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Monmouth Sewer Pipe
Made by
MONMOUTH MINING AND MFG. CO.
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MAKE TIGHT STEAM JOINTS BY USING CORRUGATED **COPPER GASKETS** FOR FLANGED PIPES CYLINDERS, CHESTS, Etc.
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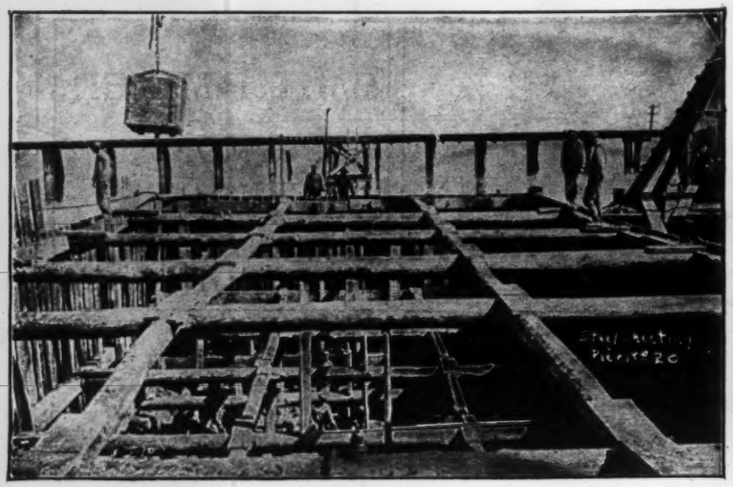
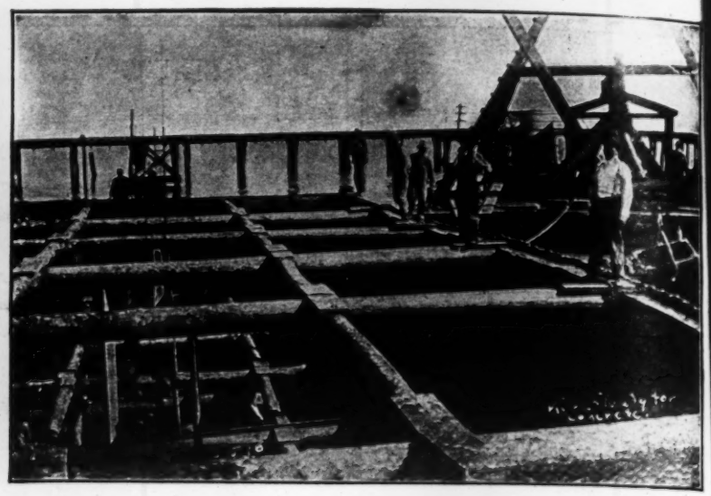




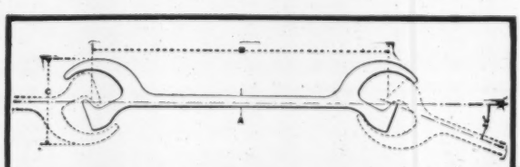
A Difficult Job Made Easy

The A. M. Blodgett Construction Co. built this 86 x 37 foot cofferdam for the causeway at Galveston. The average depth of water was 6 feet. The first course was 16 feet below water, and the sheet piling was driven through an old trestle of which half the piles had been driven on a batter.

Lackawanna Steel Sheet Piling

solved every problem. The work progressed at schedule speed, and the contractors express highest satisfaction.

Use Lackawanna Steel Sheet Piling on your next job.



A		B		C
Thickness of Web	Weight per Square Foot of Wall	Distance Center to Center of Joints	Weight per Lineal Foot	Width of Joint Over All
½ inch	40.00 pounds	12¾ inches	42.500 pounds	3⅛ inches
7/16 inch	35.00 pounds	12¾ inches	37.187 pounds	3⅛ inches
⅜ inch	21.50 pounds	7 inches	12.540 pounds	1⅛ inches

For full information address nearest office.

Lackawanna Steel Company

General Sales Office: 2 Rector Street, New York

Chicago Detroit Cleveland Boston Cincinnati
Atlanta Pittsburg Philadelphia Buffalo San Francisco

"PIONEER" Highest Quality ASPHALTS
TRADE MARK

"Pioneer" asphaltic products have been specified by leading Engineers since 1896—*and they have never disappointed.* They have withstood the crucial test of practical use so successfully that engineers have designated them as the *highest grade asphalts known.*

These various products include "Pioneer" Reservoir Waterproofing Asphalt, "Pioneer" Mineral Rubber Pipe Coating, "Pioneer" Filler Asphalt (for brick and block pavements,) "Pioneer" Road Asphalt, "Pioneer" Paving Cement, "Pioneer" Sewer-Joint Asphalt and "Pioneer" Paints.

You Can Waterproof Without Experts

"Pioneer" Reservoir Waterproofing Asphalt is always uniform, and the manner of using it is so simple that all work can be done without expert help, and to the entire satisfaction of the engineer in charge.

If there is a better material than this for waterproofing Reservoirs the foremost engineers of America are not aware of it. *And they want the best.* For 13 years "Pioneer" Reservoir Waterproofing Asphalt has met this demand. The big Bedford reservoir, Pittsburg, Pa., was waterproofed with "Pioneer." So were the reservoirs at Mansfield, Findlay and Wyoming, Ohio; and at Independence and Iola, Kansas; at Muskogee, Okmulgee and Chickasha, Okla.; at Monterey, Mexico, etc. It has also been used with the best of satisfaction on more than 100 railroad bridges.

"Pioneer" Reservoir Waterproofing Asphalt

Here is a waterproofing asphalt that is absolutely impervious to moisture — unaffected by water and weather conditions.

It is not an *oil asphalt.* It will not dry out nor disintegrate on exposure to air, water, alkalies or acids.

It is sufficiently elastic to allow for settlement in the concrete structure without breaking or cracking the waterproof stratum. Burns & McDonnell, Hydraulic Engineers, of Kansas City, Mo., have been using it exclusively for years.

They have designed a large number of municipal works, and here is what they say of "Pioneer:"

"We have found this material elastic enough to yield to the varying widths of expansion joints due to different temperature stresses, maintaining a watertight joint under all conditions."

Send for Our Specifications

Engineers, contractors and others interested in waterproofing bridges, dams, reservoirs, tanks, tunnels, retaining walls, floors, basements, foundations, subways or any kind of concrete construction should write for specifications, data, etc.

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specially made to your special order. Made of the highest grade of leather — made to suit your requirements and your machines.

We guarantee them to fit and wear.

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such as we make are beyond comparison.

We want you to ask for descriptive booklet and samples, look them over, then let us enter a trial order.

We can satisfy you.

Detroit Leather Specialty Co.
INCORPORATED
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What architect or engineer isn't looking for a perfect dampproofing paint?

Genasco Positive Seal Paint is the nearest to perfection of anything for the purpose which has yet been developed.

It is applied cold with a brush on brick, stone or concrete, and thoroughly penetrates every pore of the surface, positively sealing it against moisture.

Expensive cut stone is frequently discolored from mortar. This can be entirely overcome by first applying a coat of Positive Seal Paint.

Applied to concrete, brick or stone walls, it **can be plastered over** without lathing or furring.

One or two coats on hollow tile partitions or floors of fireproof construction renders it not only dampproof, but practically waterproof, preventing damage to ceiling and wall decorations from water overflowing in rooms above.

Cellar walls should be first coated with Positive Seal Paint and then whitewashed, making them dry, sweet and clean.

Detailed information about the various Genasco waterproofing materials is contained in the booklet, "Waterproofing by the Positive Seal Method," mailed free on request.

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Largest producers of asphalt in the world.
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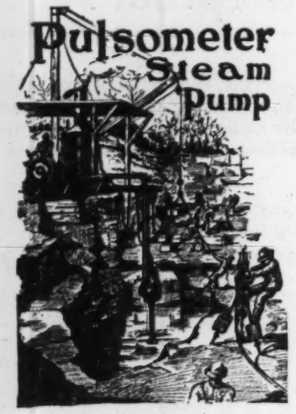

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For unwatering quarry pits and all rough service water elevating from substructures the Pulsometer steam pump is considered part of the necessary equipment by most of the money making Contractors.

It will drain an excavation, cofferdam, sewer trench or shallow mine about as quickly and easily as any other known method. In its capability of operation while suspended and of being raised and lowered and swung about without at all interrupting its work the Pulsometer stands without an equal.

No engine, belt, oil, packing or special foundation; merely a steam pipe from boiler—that's all.

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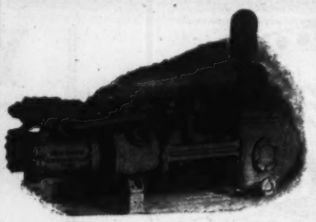

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Single and Duplex Pumps, Boiler Feeders, Water Supply Pumps, Fire Pumps, Air Pumps and Condensers, Hydraulic Pumps

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Simple, Compound and Triple Expansion Jet and Surface Condensers

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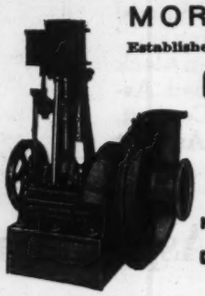

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Correspondence invited.

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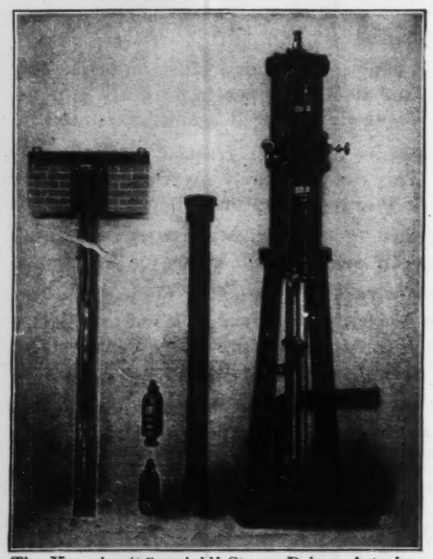

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Condensers, Feed Water Heaters, Water Cooling Apparatus

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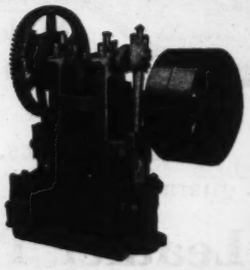

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FOR ALL PURPOSES

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EXPRESS

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ATLANTIC HYDRAULIC MACHINERY CO.

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The Slogan of the Cameron—"Character: the Grandest Thing"

A CAMERON PUMP will not "short stroke," as it cannot reverse until the completion of the full stroke.

A CAMERON PUMP can be run as fast as steam can drive it, or so slow that one can scarcely detect the movement; and as there is no "dead centre," a CAMERON PUMP will start at any point.

Another thing, a CAMERON PUMP can be taken apart and all its working parts exposed without disconnecting any of the piping.

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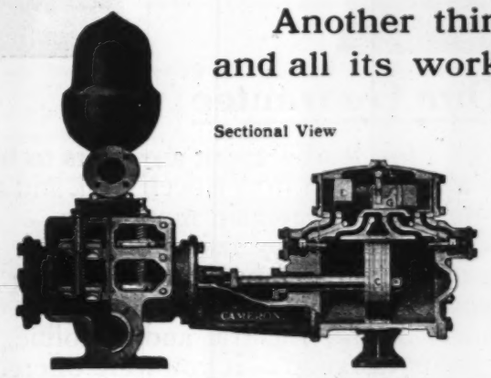

New Cameron Catalog, Edition "M," illustrates and describes all types of Cameron Pumps. Sent on request to interested pump users and intending purchasers.

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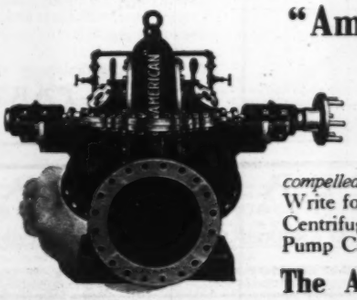
Foot of East 23d Street **NEW YORK CITY**

May 12, 1910

2 Grand Prizes and 5 Gold Medals

All the Grand Prizes and All the Gold Medals given to Pumps by the Alaska-Yukon-Pacific Exposition at Seattle last summer were awarded to



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The reason is **"American"** pumps are designed with waterways having the best possible flow lines, and the judges were *compelled* to recognize their superiority. Write for "Efficiency Tests of American Centrifugals." Complete Centrifugal Pump Catalog No. 104 Free.

The American Well Works

General Office and Works, Aurora, Ill., U. S. A. Chicago Office, First Nat'l Bank Bldg.

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Steam Turbine Driven
TURBINE AND TURBO-VOLUTE PUMPS
Fit Many Services Perfectly
WE BUILD THE COMPLETE UNITS
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205 LaSalle Street, Chicago, Ill.
Reeves & Skinner Machinery Company, 617 Chemical Bldg., St. Louis, Mo.

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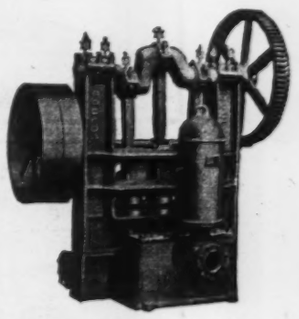
A RUNNING WATER SUPPLY PLANT
that takes care of itself—furnishes its own power—requires no attention or repairs—that is what you get in a **RIFE HYDRAULIC RAM**
Raises water **30 feet for every foot of fall** from any nearby stream, spring or pond. Any capacity for all home and farm uses. **Irrigation, Town Plants, Railroad Tanks,** Etc. Low in cost, high in efficiency.
Satisfaction Guaranteed, Plans, Estimates and Book Free.
RIFE ENGINE CO. Rm. 2162 Trinity Bldg., New York

ECONOMY

The economy of Goulds Triplex Power Pumps for Boiler Feeding and other duties is acknowledged by Engineers everywhere. In our different types we can meet any condition of service, capacity or working pressure, reducing the cost of operation to a minimum.



When driven by belt or direct connected to Electric motor they require practically no attention and when working under most conditions can be operated entirely automatically.

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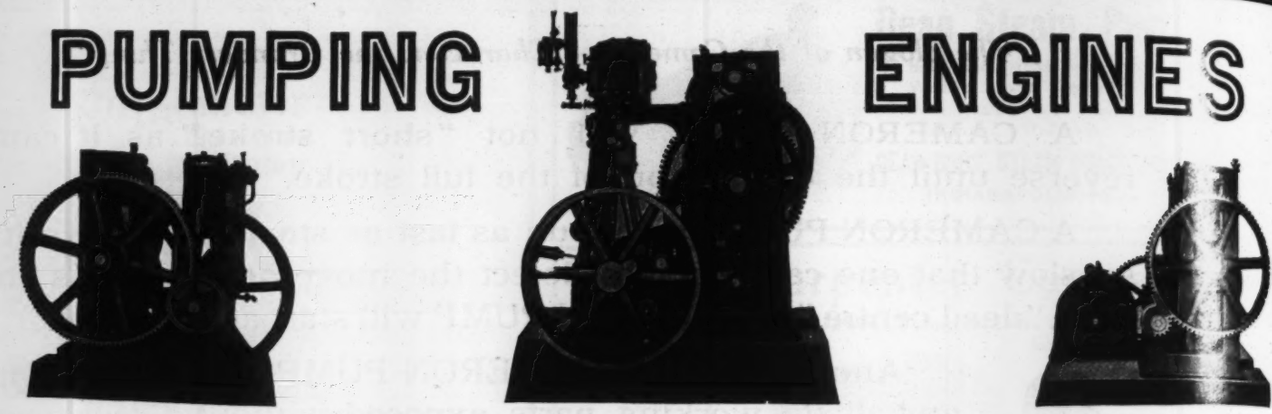
New York Boston Philadelphia Pittsburg Chicago Louisville
St. Louis Denver San Francisco Montreal Los Angeles

PUMPING ENGINES



Engineers, Read Our Guarantee

Luitwieler Pumps are guaranteed to work under a full load without any bolts to hold them to a foundation. They will in this condition throw a fire stream from a deep well, and a ten inch wood screw set on end at the topmost point of the machine will remain motionless.

We guarantee to save steam pump users 66% of their steam by using our steam pumping engine. We will save 80% of the power wasted through pumping by compressed air. If you use centrifugal pumps we save you 40% to 60% of your power.

We build Duplex and Triplex Pumping Engines, Steam, Electric and Gasoline, self-contained on one base, perfectly balanced without any jar or vibration. If you were offered a pump for a gift it would be cheaper to purchase a Luitwieler, as it would save its first cost in a year.

Write us about your pump troubles. We will set you right. Put us to the proof, and see us make good.

LUITWIELER PUMPING ENGINE COMPANY, ROCHESTER, N. Y.

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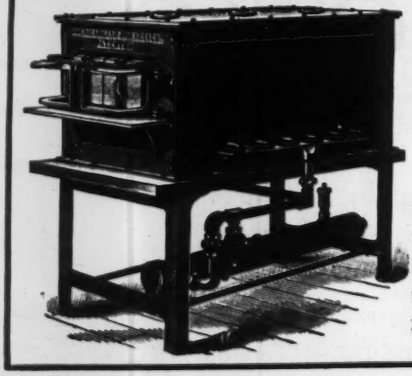

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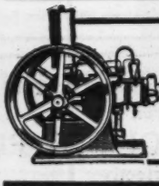

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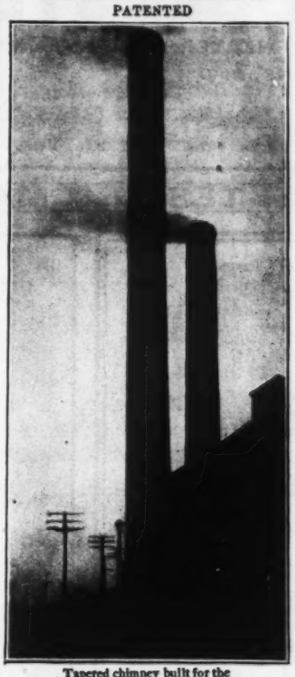

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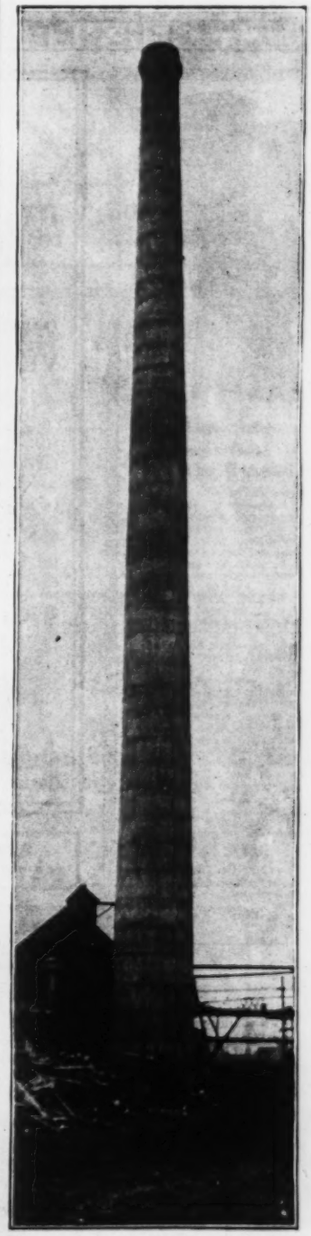

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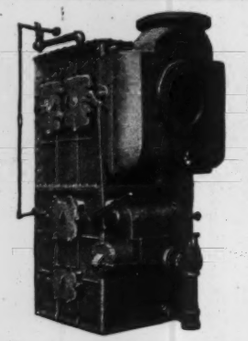

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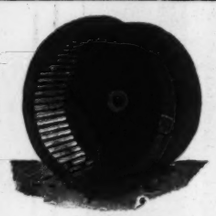

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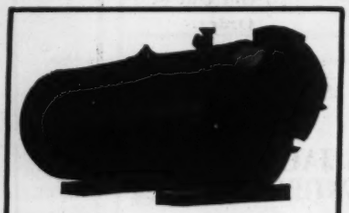

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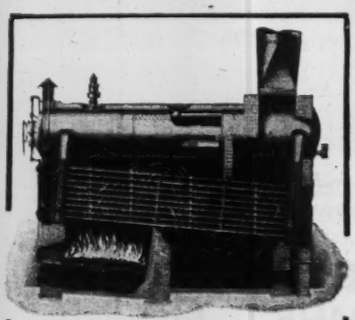

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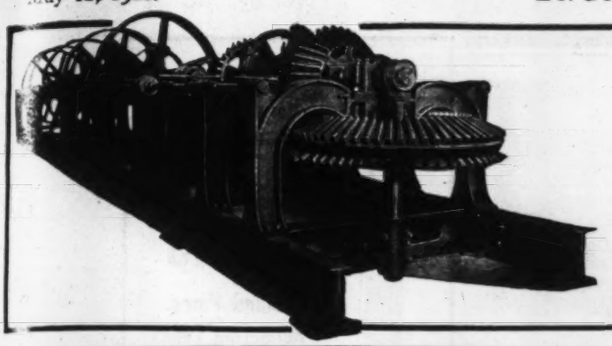

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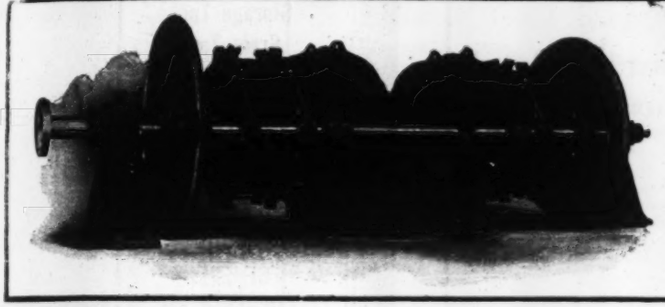

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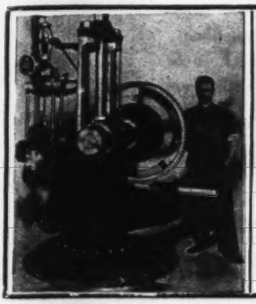

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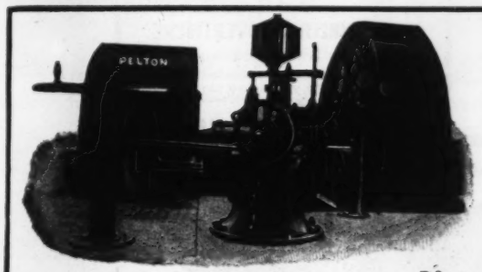

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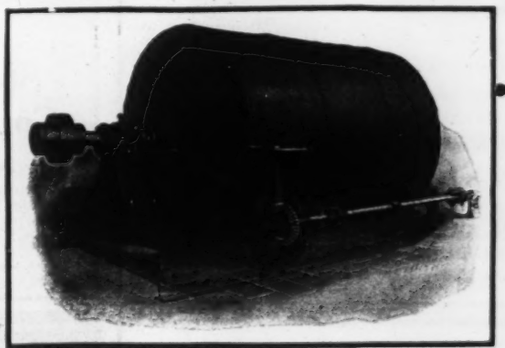

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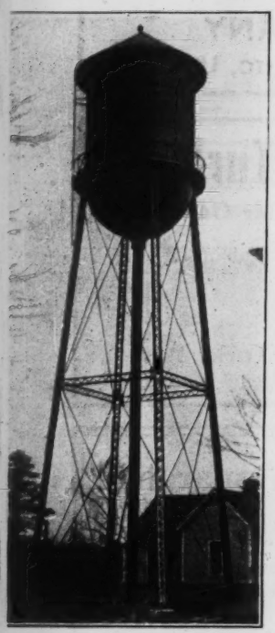

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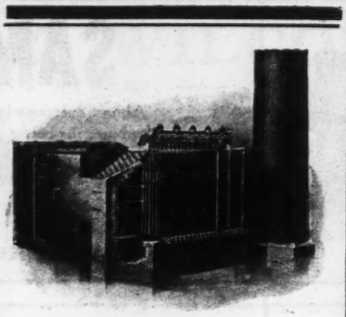

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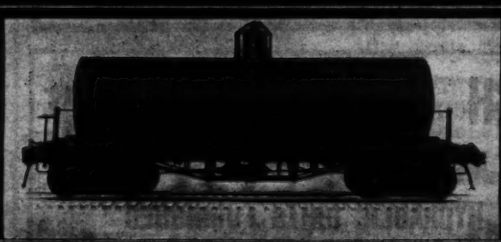

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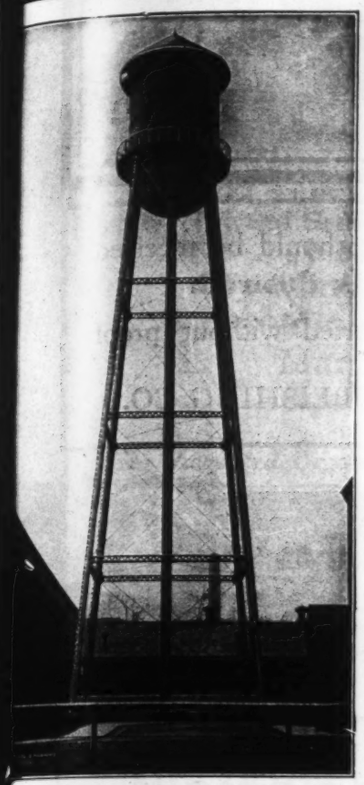

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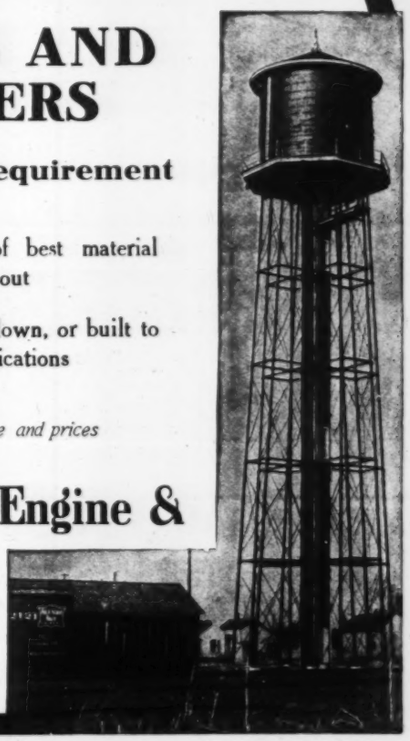

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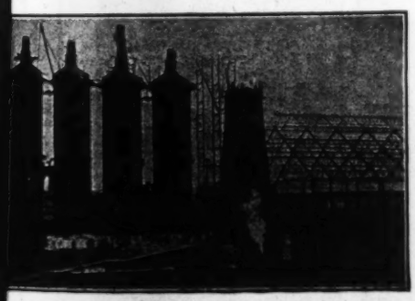

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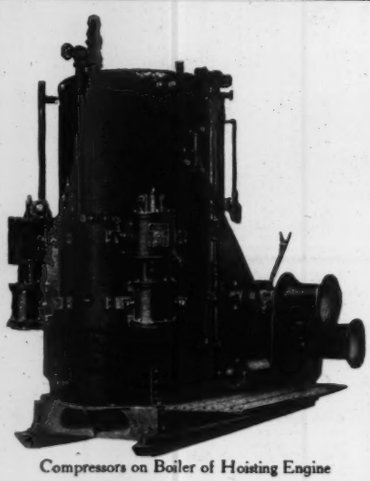
Westinghouse



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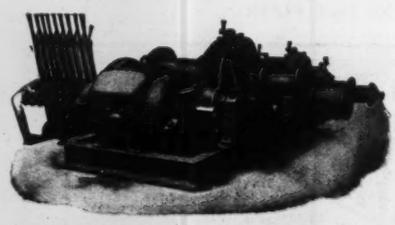

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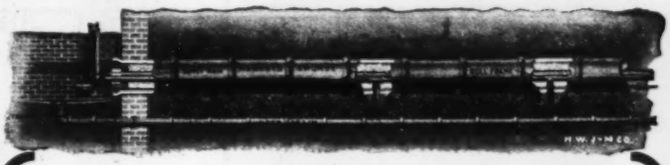

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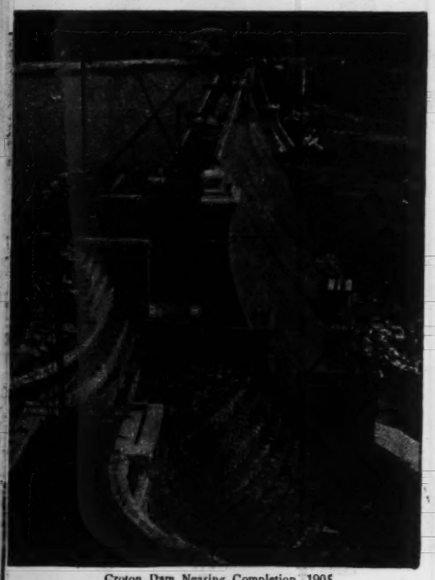

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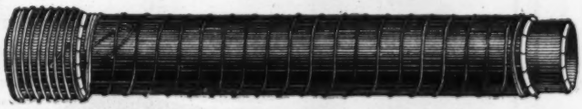

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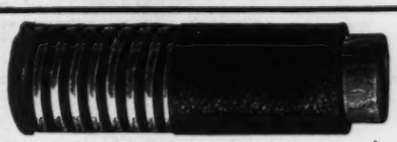

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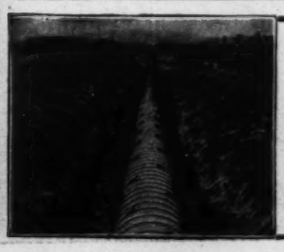

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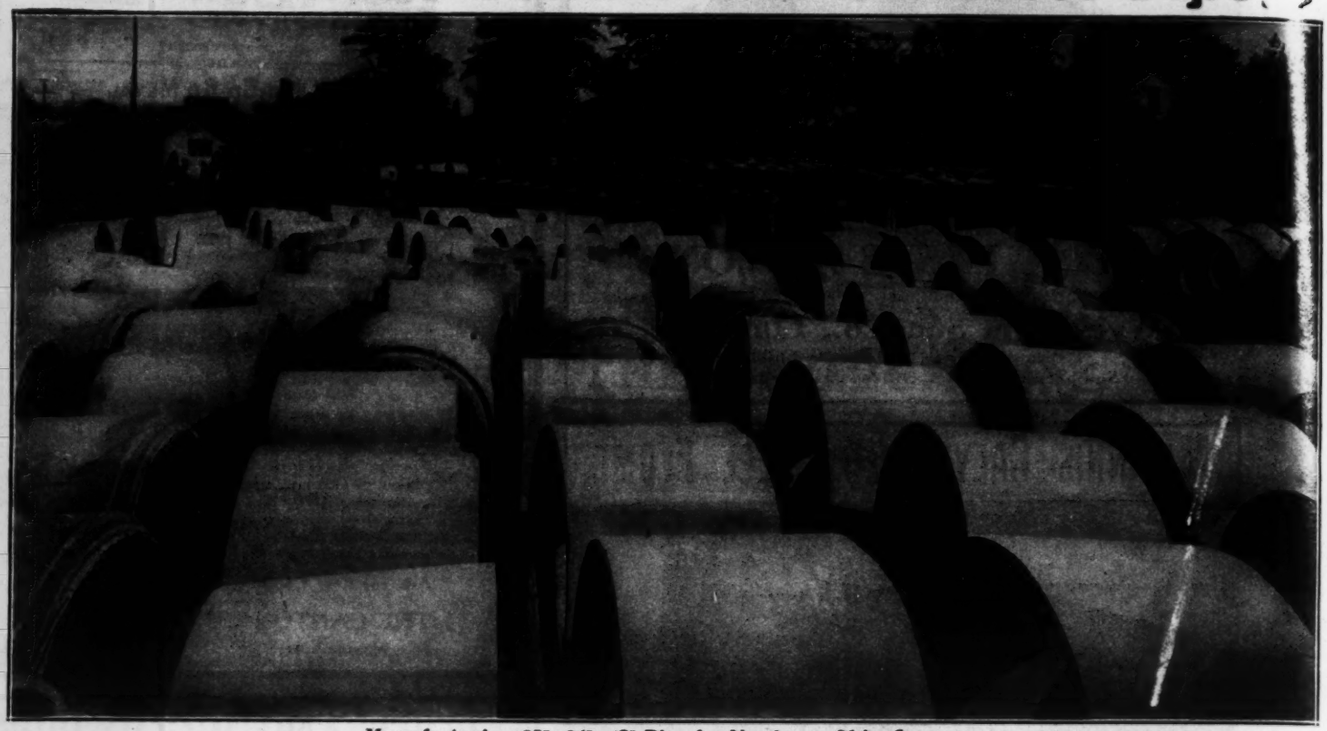

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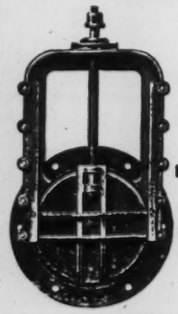

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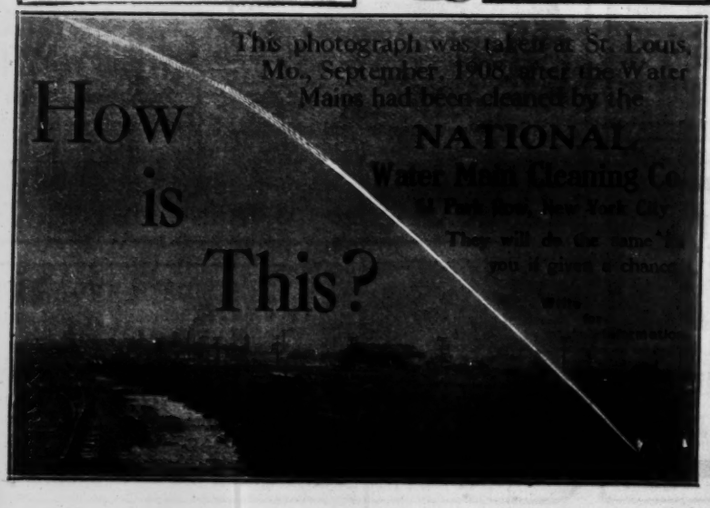
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for laying submerged lines across rivers and other waterways and for intake pipe, etc. The ball is carefully machined and reinforced.

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"Valves provided with a free, straight-way passage, with least resistance to flow of fluids through pipes."

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Coffin Valve Co.

Boston, Mass.

Makers of Largest Valves in America

Send for Catalogue 12-B, if interested

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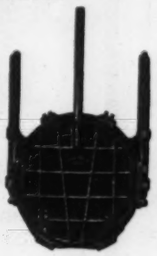

Fig. 211 24 inch Self Contained Sluice Gate.

Fig. 210 6 inch Standard Coffin Gate Valve.

Fig. 212 48 inch Circular Rising Screw Sluice Gate.

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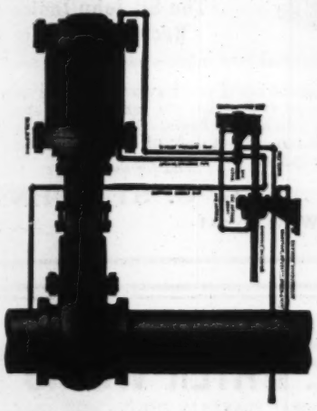

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RATE CONTROLLERS
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Those who have tried it know that it pays handsomely to have a station meter on every important pumping main.

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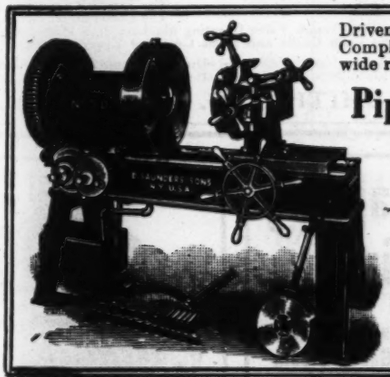

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Pipe-Threading and Cutting Machine

fills a long felt want—it's an ideal machine for its work. Range 1" to 6"

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Contractors for Municipal and Industrial Filters, Water Softeners and Sewage Disposal Plants

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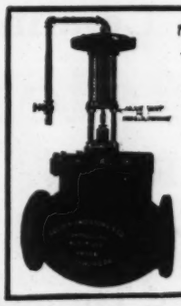

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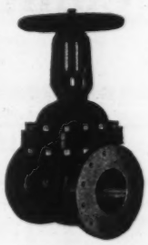

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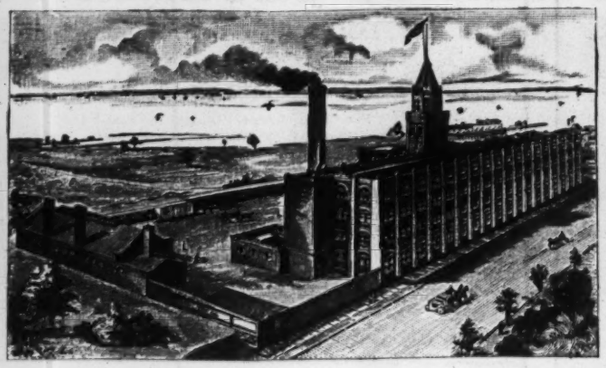

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The St. John Indicating and Recording Steam Meter

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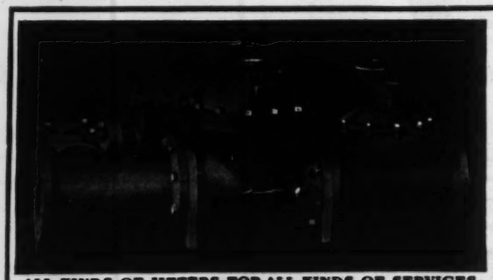

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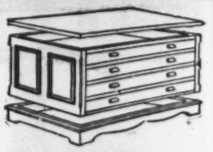

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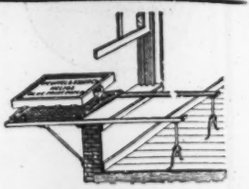

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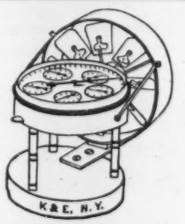

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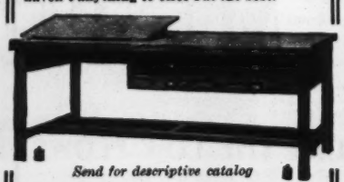

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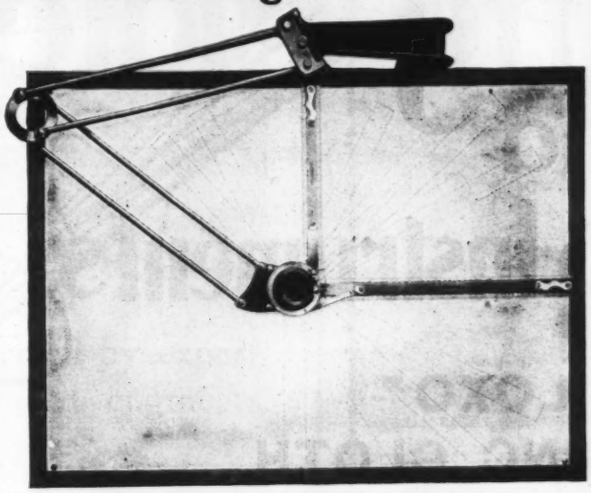

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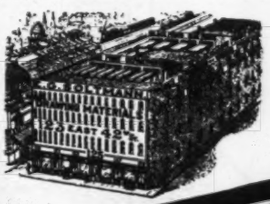

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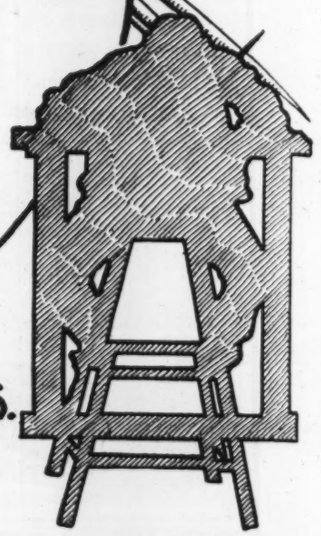

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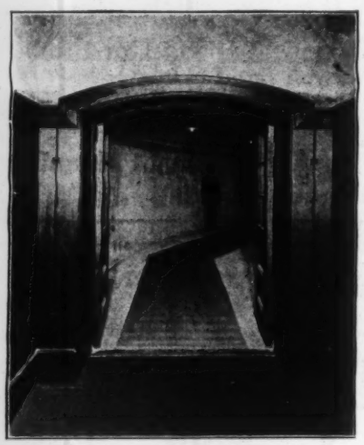

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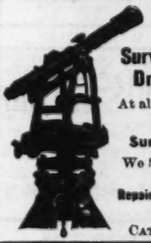

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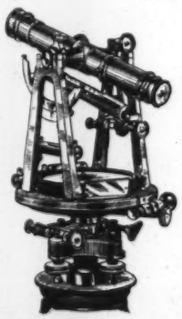

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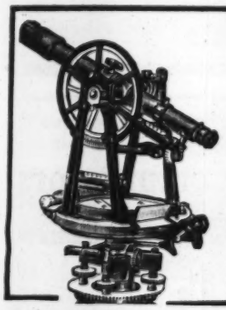

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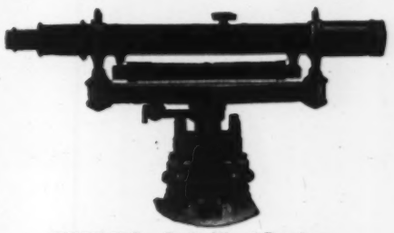

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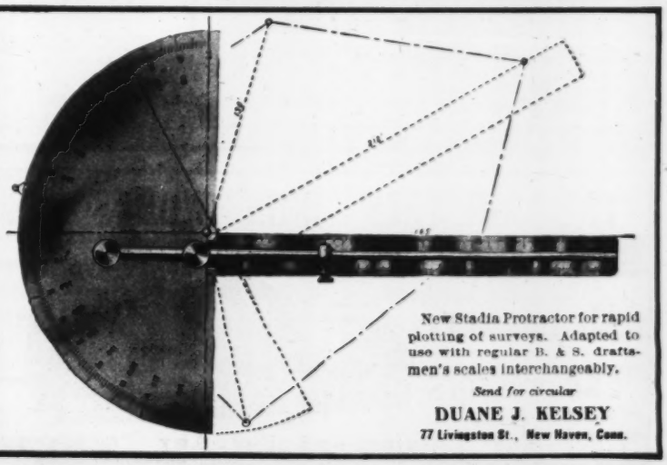

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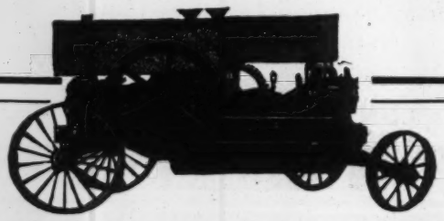

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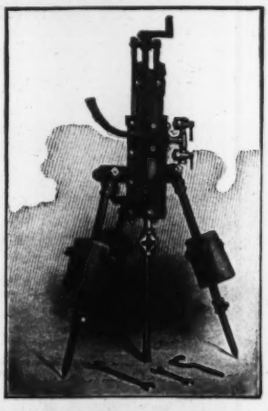

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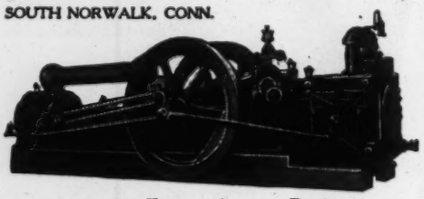

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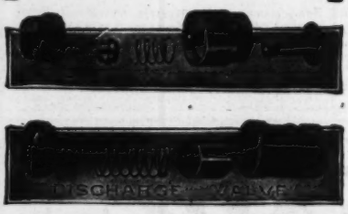

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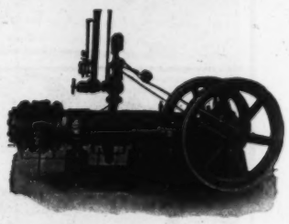

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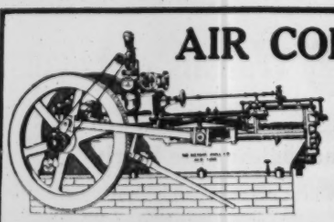

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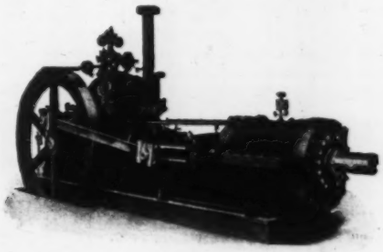

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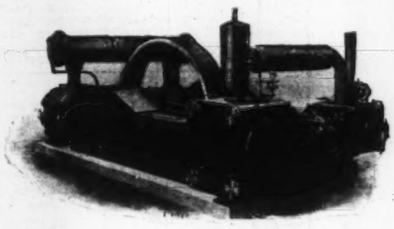

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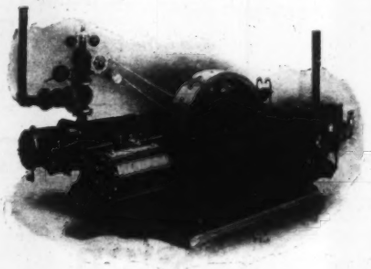

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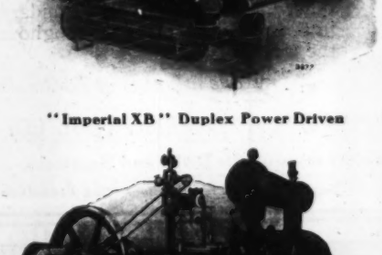

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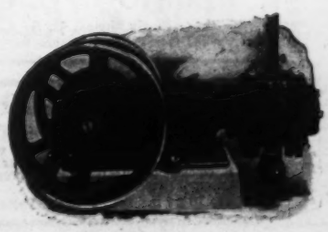

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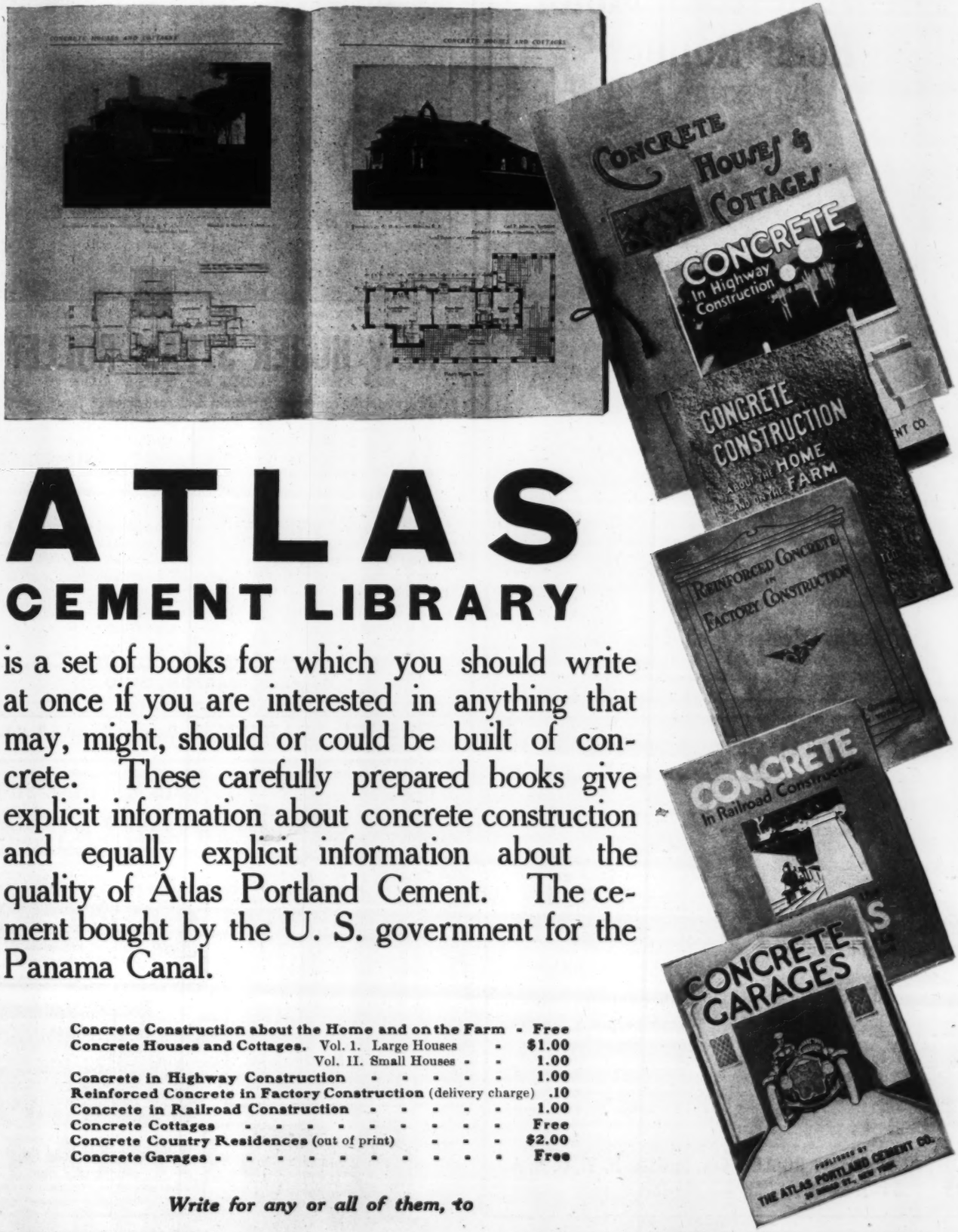
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Sizes: 7-8-10-12-15 Tons

Using Gasoline, Kerosene or Distillate

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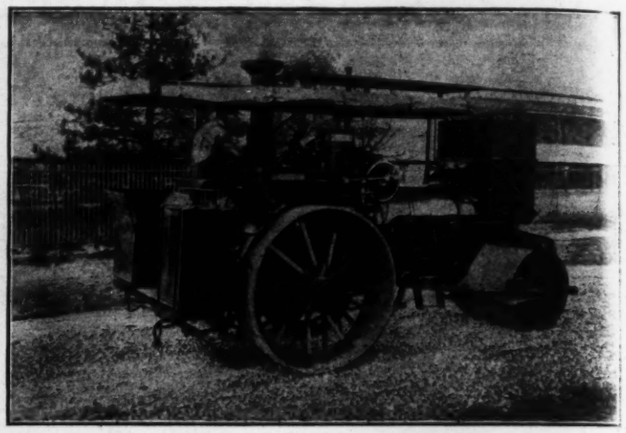

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It is perfectly equipped for street and road work. Inner edges of rear wheels are beveled to give proper crown when finishing a road.

If outfit is needed for hauling, front roller can be taken off and regular truck wheels put in place of it. Then cleats bolted to rear wheels complete the traction-engine outfit.

For tearing up macadam road we furnish spikes to insert in rims of rear wheels.

This combined outfit is an ideal one for the general contractor. It is thoroughly practical and successful. Every contractor has need of a traction engine part of the time; also a road roller part of the time. Here you have both combined in one. This means much saving in cost of equipment, without in any way lessening the capacity for work.

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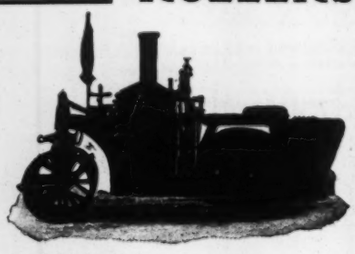
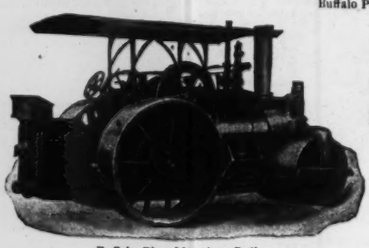
Macadam Rollers, Tandem Rollers, Asphalt Rollers,



Buffalo Pitts Double Direct Drive Tandem Roller



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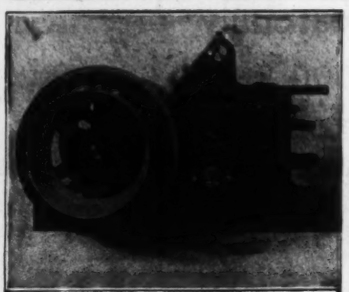

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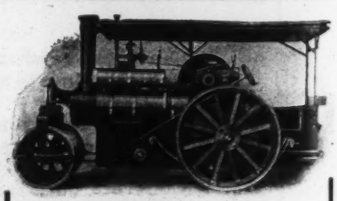

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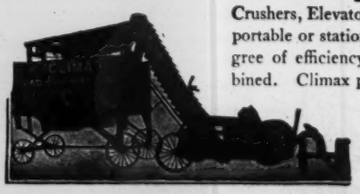

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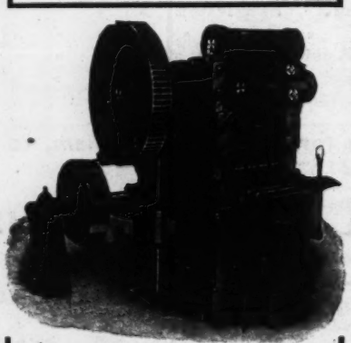

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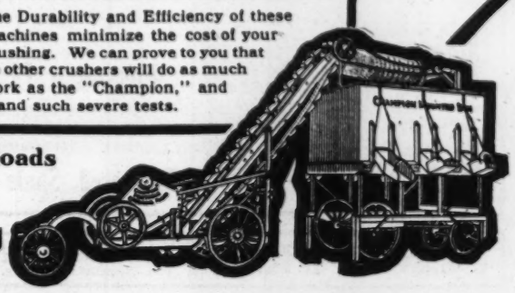

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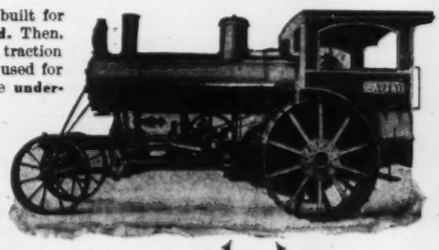

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WE CATER TO EXPORT TRADE.

Eliminate Heavy Repair Expense

by using

TEXACO

Macadam Binder

the permanent binder for dustless roads

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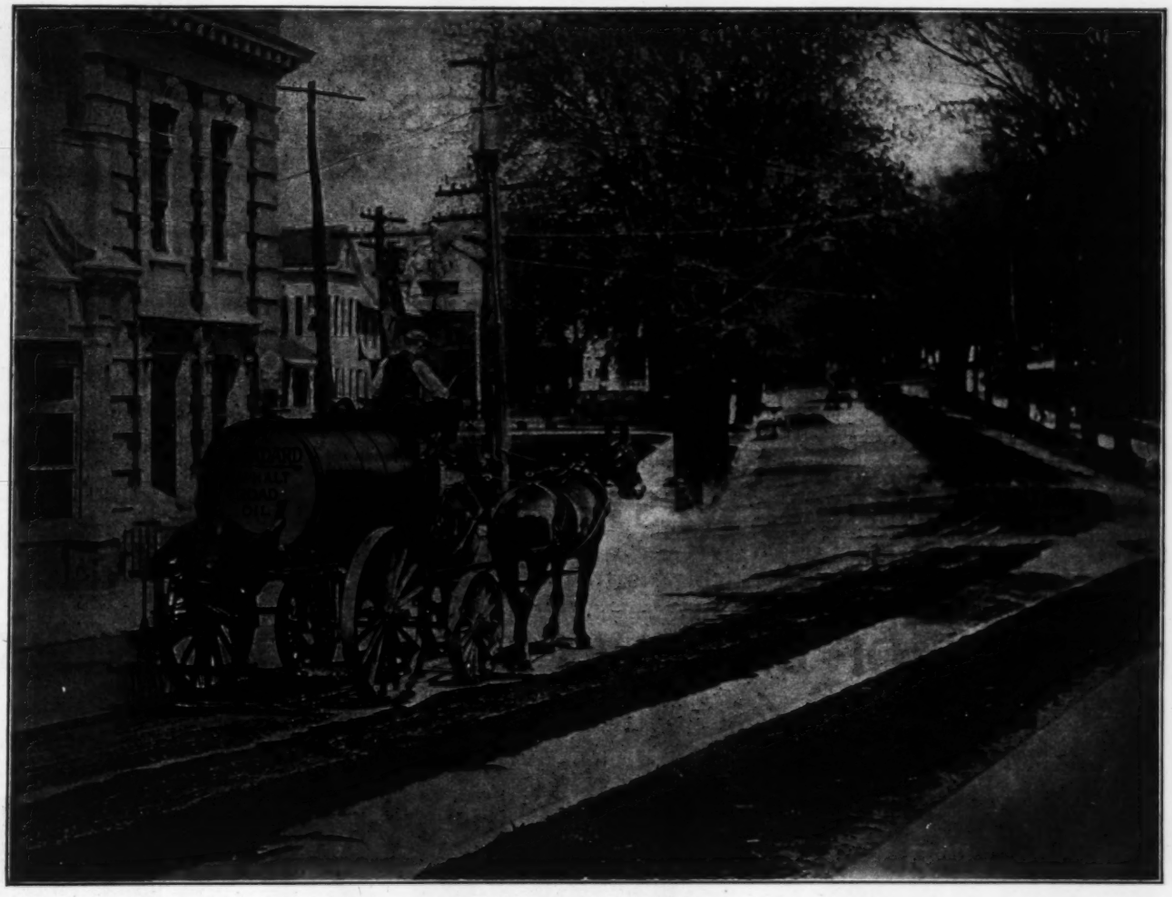
STANDARD

Asphalt Road Oil
Emulsifying Road Oil
Macadam Asphalt Binder



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Macadam Asphalt Binder is a heavy product, almost solid asphaltum, used in constructing macadam and all other roads where asphaltic material is required.

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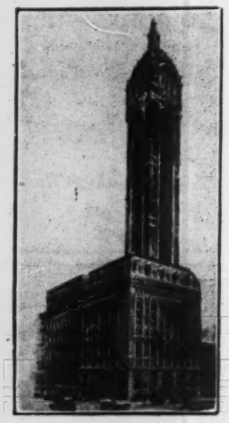

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612 Feet, 41 Stories

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Our numerous patents which have increased the economy and safety in such work.
Three separate organizations and plants permanently located in the

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enable us to undertake

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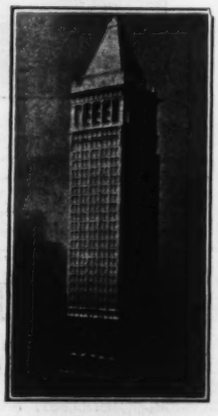

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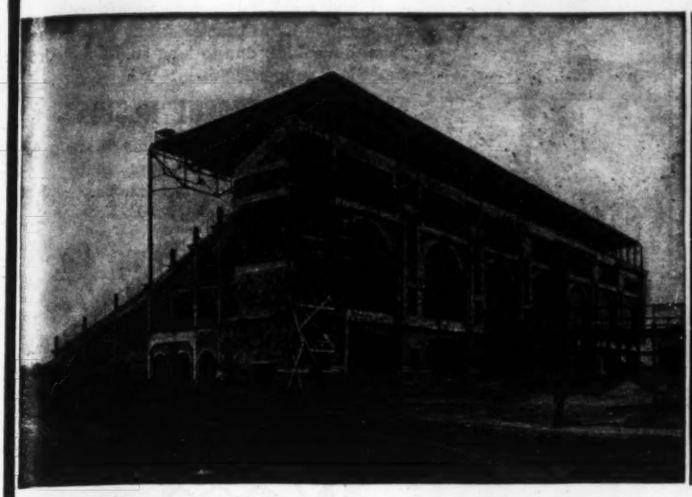

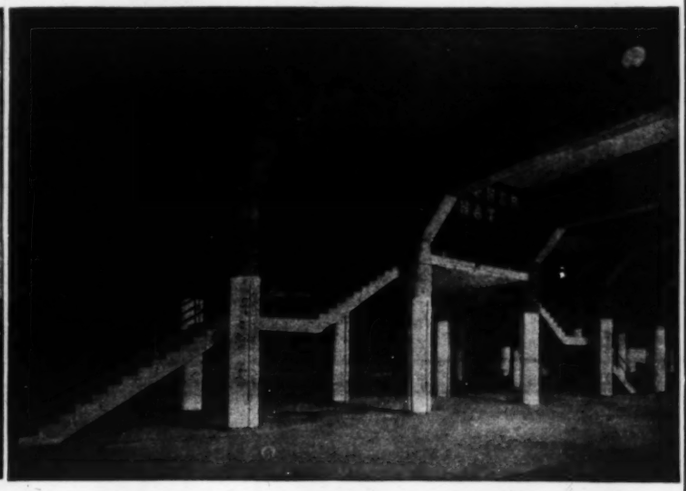

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The structure also illustrates the advantages of the **Kahn System Service** in building work. Our skilled engineers work hand in hand with both architects and contractors, assisting with estimates, designs and construction details—giving them the full benefit of our specialized experience in reinforced concrete. Such service shows its results in the strength, beauty and economy of the completed structure.

KAHN SYSTEM

Reinforced Concrete

Back of the Kahn System service is the complete line of Kahn System Products. **Kahn Trussed Bars,** with rigidly connected shear members, for concrete beams and girders. **Rib Metal** for slabs. **Built-up Hooping** and **Cup-Bars** for columns. **Hy-Rib** for roofs, siding, partitions, furring and ceilings. **Rib-Lath** and **Rib Studs** for plaster and stucco work. **United Steel Sash** for fireproof windows, and Trus-Con Chemical Products for waterproofing and finishing concrete.

Write us about your structure—Buildings, Bridges, Reservoirs, Sewers, etc.—and our engineers will submit you estimates, designs, etc., without charge. Catalogues free.

TRUSSED CONCRETE STEEL COMPANY

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Just the fan for mine and tunnel ventilation.

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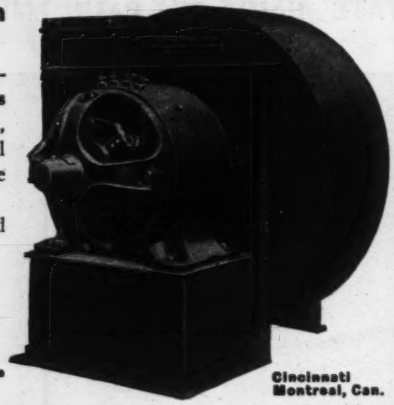

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Entrust your pump problems to us. A satisfactory solution will be given. State your requirements. Ask recommendations.

Write today for Catalog 187 E. N.

Buffalo Steam Pump Co.

BUFFALO, N. Y., U. S. A.

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¶ During the year 1909, for obvious reasons our advertising has been cut down to the irreducible minimum. Nevertheless, since January 1st, 1910, we have commenced construction work on the following dams and power houses :

¶ **A. E. Reed & Co., Bishop's Falls, Newfoundland.** Pulp and paper mill. Height above water line 45 feet, length 700 feet. On the Exploits River.

¶ **James White Power Co., Athens, Georgia.** Height above water line 48 feet, length 820 feet. On the Oconee River. Power House for four units.

¶ **Chippewa Valley Railway Light & Power Co., Eau Claire, Wis.** Height, 48 feet, length 470 feet. On the Red Cedar River. Power House for five units.

¶ **Consumers Power Company, Cannon Falls, Minn.** Height above water line 54 feet, length 800 feet. Power House for four units.

¶ **Consumers Power Co., Mankato, Minn.** On Blue Earth River. Height above water line 60 feet, length 550 feet. Power House for four units.

¶ While we are waiting for this page to fill up with material similar to the above, we desire to announce that we are now prepared to furnish insurance of the highest responsibility on the Ambursen Dam. This insurance may be secured either for the construction period alone or as a permanent insurance to be renewed from year to year, and at a reasonable premium rate. The insurance also carries with it in each case the inspection and approval of the Consulting Engineer of the insuring company, both as regards the sufficiency of the plans and the excellence of the subsequent construction.

¶ This entirely new departure in hydro-electric developments serves to emphasize the character of the work which we design and construct. While we are well aware that there is not a single one out of the fifty owners of Ambursen dams already constructed who would pay $10 a year for any insurance, the above feature may and probably will have a distinct and favorable influence on the market value of the securities issued by Hydro-Electric or Irrigation Companies who are our clients.

Respectfully submitted,

Ambursen Hydraulic Construction Company

Engineer-Constructors

176 FEDERAL STREET : : : : : BOSTON, MASS.

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From 100 to 1500 feet deep—any locality

AND ERECT

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AND INSTALL

Complete Water Supply Plants for Factories, Farms or Suburban Homes

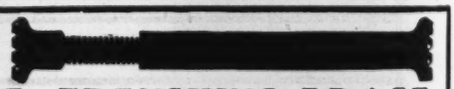
Stothoff Bros., Flemington, N. J.

Branch Office: 16 Murray Street, New York City

General Agents for Challenge Co.'s Windmills, Tanks and Structures, manufactured at Batavia, Ill. Wholesale and Retail.

BROKEN STONE FOR CONCRETE AND MACADAM Telephone, 2488 Rector Send for Catalogue Calvin Tomkins, 17 Battery Pl., N.Y. | TOMKINS COVE BLUE STONE

This is the Best



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Test Borings for Water or Foundations

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Air Compressors.....1, 7, 12, 24, 25, 26
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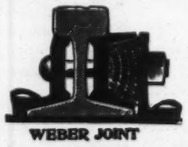

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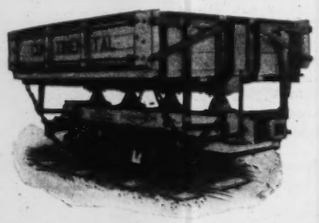

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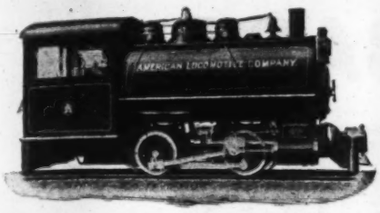

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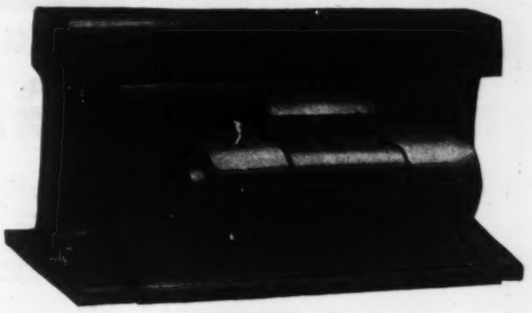

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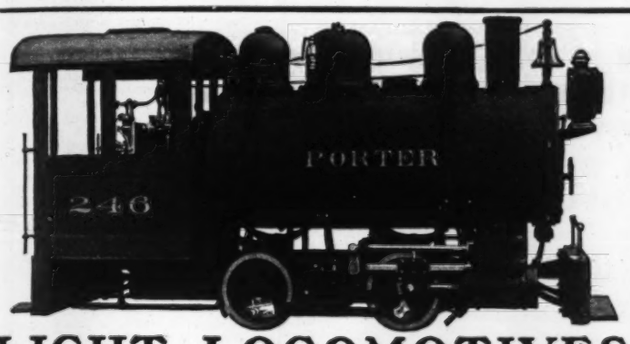

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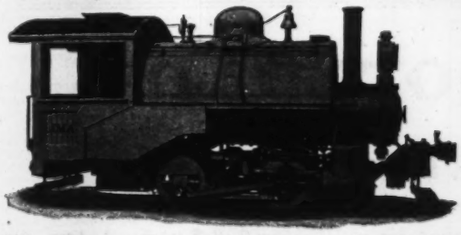

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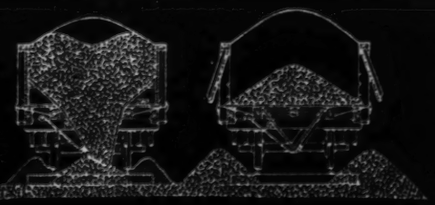

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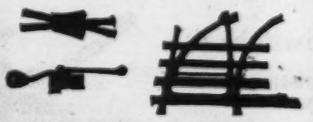

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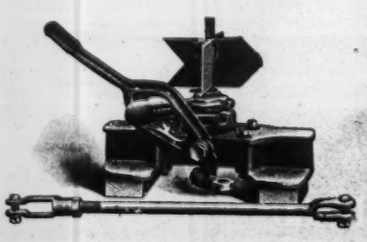

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TECHNICAL GRADUATE, mechanical engineer, age 35, capable mechanic, executive ability, seeks permanent employment. Address "Z. 19," Engineering News, New York. 19-5t

AN EXPERIENCED electrical, mechanical and hydraulic engineer, technical education, desires position with company proposing to erect new plant, or modernizing present power equipment; can draw plans and specifications producing economic results. Address "H. B. 19," Engineering News, New York. 19-1t

Civil Engineers.

CIVIL ENGINEER, technical training, seven years' experience, references from present and all previous employers, desires change. A position offering more chance for advancement is wanted. Address "F. A. 11," Engineering News, New York. 11-tf

GRADUATE of Princeton University, having specialized since graduation in concrete construction and hydraulic work, wishes to enter established firm with view to working up. Address "G. B. 2," Engineering News, New York. 2-tf

CHIEF ENGINEER of large experience in all kinds of railway location and construction of old or reconnaissance of new lines and estimates and reports thereon a specialty. Best of references. Address "D. 8," Engineering News, New York. 8-12t

PRINCIPAL ASSISTANT ENGINEER maintenance of way, with one of best roads in South, for personal reasons, wishes to change; efficient also in location and construction; prefer position of permanent nature. Address "F. 11," Engineering News, New York. 11-10t

RESIDENT ENGINEER, designing, draftsman, reinforced concrete sewers, details, foundations, examinations, reports, 12 years' experience. Address "I. A. 15," Engineering News, New York. 15-12t

GRADUATE CIVIL ENGINEER with seven years' experience in railroad location and construction and general engineering, wishes position in the West; good references. Address "K. A. 15," Engineering News, New York. 15-6t

GRADUATE CIVIL ENGINEER, 3 years on railroad and coke plant construction, 2 years as contractor's engineer on macadam roads and heavy construction; open for engagement; single; will go anywhere with responsible firm. Address "S. A. 12," Engineering News, New York. 15-10t

GRADUATE IN CIVIL ENGINEERING, experienced in railroad and mine surveying and railroad construction, with one year's experience in teaching mathematics and surveying, desires teaching. Address "G. 16," Engineering News, New York. 17-3t

CIVIL ENGINEER, technical graduate, eight years' varied experience; field and office work, water-works, steel erection and reinforced concrete construction; good experience in industrial plant construction; good general draftsman; now employed; desires work on industrial plant work or water power development, either in field or office. Address "K. A. 13," Engineering News, New York. 16-6t

YOUNG CIVIL ENGINEER (25), desires change; 5 years' practical experience in railroad and mine engineering; speaks Spanish. Address "H. 17," Engineering News, New York. 17-8t

ENGINEER AND SURVEYOR, extensive experience in charge city and country work, subdivisions, topographical work, resident engineer, construction, sewers, roads, excavations, concrete, etc.; contractor's quantity and cost estimator. Address "I. A. 17," Engineering News, New York. 17-4t

CONTRACTOR AND CIVIL ENGINEER with large experience in all kinds of railroad work, desires position with consulting engineer; experienced in reports, locations, estimates and valuations; now actively engaged in large contracts; would invest a considerable sum of money if after trial, business was satisfactory. Address "K. B. 17," Engineering News, New York. 17-8t

CIVIL ENGINEER, 32, varied experience, now employed as university professor, desires employment between June 1 and Oct. 1, anywhere; can furnish instruments. Address "H. 18," Engineering News, New York. 18-5t

WANTED—A position with a prospect of permanent employment by graduate C. E., 25 years' experience as topographer, field draftsman, inst. on R. R. survey, timekeeper and Assistant Supt. of transmission line construction; some drafting and office work. At present employed as instructor in Engineering School; location anywhere; free early June. Address "X. 18," Engineering News, New York. 18-2t

GRADUATE CIVIL ENGINEER with over twenty years' experience in steam and electric road work, design and construction of hydro-electric plants, and concrete structures, desires engagement as chief or consulting engineer with railway corporation, engineering and constructing firm or financial house; can furnish desirable references as to ability and experience. Address "C. A. 18," Engineering News, New York. 18-4t

LOCATING and Construction Engineer, with 12 years' experience in railroad work, desires to change; best of reference. Address "P. B. 18," Engineering News, New York. 18-12t

CIVIL AND MINING GRADUATE (30), ten years' varied experience superintending construction, designing, surveying, purchasing, handling correspondence; several years in reinforced concrete; moderate salary. Address "S. 18," Engineering News, New York. 18-3t

CIVIL ENGINEER; 10 years on general engineering, surveys, municipal, railroad, construction work, roads, sewerage; good draftsman; have field instruments. Address "H. A. 18," Engineering News, New York. 18-2t

GRADUATE of Mass. Institute of Technology, seven years' experience in railroad construction, maintenance, bridge and concrete work, wishes permanent position in West; best references. Address "N. A. 18," Engineering News, 1636 Monadnock Block, Chicago. 18-12t

DIVISION ENGINEER, graduate, twelve years' experience mining, hydraulic and railroad surveys, design and construction; now finishing up four years' railroad work; previous position three years; six years' experience all kinds of concrete construction. Address "O. B. 18," Engineering News, New York. 18-2t

ENGINEER (38), fifteen years' experience on location construction, sewers and heavy foundation work; superintendent for two years for company doing their own work; have set of field instruments; references from former employers. Address ENGINEER, 1350 North 19th St., St. Louis, Mo. 18-2t

WANTED—Position as Chief Engineer, assistant chief engineer for coal company, or assistant engineer on sewer work; good references. Address "W. 19," Engineering News, New York. 19-4t

CIVIL ENGINEER desires position with chance for expansion; three years' mechanical work and 4 years' civil work at leading American colleges; has had 6 years' experience, partly on large work; started at the bottom in three different positions and finished in charge of work; will work in any part of world. Address "M. 19," Engineering News, New York. 19-1t

HYDRAULIC ENGINEER—Designing engineer, unusually expert on power plant and general hydraulic design, 10 years' experience including college; would resign present position as designer for consulting engineer for position with a future; best references. Address "A. A. 19," Engineering News, New York. 19-3t

REINFORCED CONCRETE ENGINEER—Technical graduate, Jun. A. S. C. E., at present employed as engineer for one of the largest reinforced concrete construction companies in designing Reinforced Concrete Buildings of all classes, estimating and engineering construction; thoroughly familiar with economical design of reinforced concrete construction and handling work; better opportunity only desire for change; permanency with well established firm only considered. Address "K. A. 14," Engineering News, New York. 19-4t

HYDRAULIC ENGINEER, college graduate, 10 years' experience in surveying and construction, municipal engineering, power plants, examinations, reports, etc., wishes to change present position. Address "Q. 19," Engineering News, 1636 Monadnock Block, Chicago. 19-1t

CIVIL ENGINEER, graduate C. E., 28, married; four years' experience, concrete construction, hydraulics, dams, tunnels, field and office, desires change. Address "H. 13," Engineering News, New York. 19-4t

CIVIL ENGINEER, twenty years' practical field experience as resident, division, chief engineer and manager construction in charge difficult mountain railroad locations; heavy railroad construction, several tunnels, deep foundations, large river cofferdams, heavy masonry, trunk sewers, heavy timbering, etc., will be idle in a few days and wishes engagement. Address "B. A. 19," Engineering News, New York. 19-1t

CIVIL ENGINEER desires position, country town, experienced surveys, property development, topographical work; dams, reservoirs, water power, concrete design and construction; good computer; draftsman. Address "H. A. 19," Engineering News, New York. 19-4t

WANTED—By experienced graduate engineer of ability permanent position with contractor or consulting engineer who wishes to build up or maintain on an efficient basis, a department handling the design and construction of reinforced concrete. Address "N. B. 19," Engineering News, 1636 Monadnock Block, Chicago. 19-2t

GOOD ENGINEER and Surveyor, long experience, railroad location, construction, sewers, water-works, fine city surveying, property lines, etc., wants engagement. Address "F. A. 19," Engineering News, New York. 19-3t

CIVIL ENGINEER and surveyor, 36, technical, desires change and position with engineering or contracting firm; large experience in constructing work, municipal engineering, water and sewage systems, steam and electric railway construction and property development; best references. Address "K. B. 19," Engineering News, New York. 19-1t

GRADUATE CIVIL ENGINEER, twenty years' experience in the design and construction of sewerage and sewage disposal systems and other municipal improvements, and the subdivision and development of suburban property, wishes position. Address "G. A. 19," Engineering News, New York. 19-5t

Bridge and Structural Engineers.

STRUCTURAL ENGINEER, University graduate, in charge of Engineering Department of structural and ornamental iron plant, desires change. Address "I. A. 14," Engineering News, New York. 14-12t

ESTIMATOR, competent and experienced, in computing quantities from plans, lumber masonry, brick work, etc., and cost of same in place; also in competing estimates for total costs of buildings; capable of managing building business; references if desired. Address "E. 17," Engineering News, New York. 17-3t

STRUCTURAL AND MECHANICAL ENGINEER, collage man (30), experienced in drawing room, field and shop work; experience includes blast furnaces, plate, beam and column work, cable and shaft towers, bridges and tall buildings, dredging, machinery, etc., desires a permanent position with good opportunity July 1st as superintendent, manager or engineer. etc.; salary, $1,800 per year. Address "C. 18," Engineering News, New York. 18-2t

STRUCTURAL ENGINEER, university graduate; six years' experience detailing, designing and checking bridges and buildings, desires responsible position; salary. $150. Address "I. A. 18," Engineering News, New York. 18-2t

STRUCTURAL and Mechanical Engineer, 12 years' experience bridge tramways, car dumpers, direct unloaders, cranes, designs, strain sheets, squad foreman, chief draftsman. Address "G. A. 15," Engineering News, New York. 18-3t

CHIEF ENGINEER on structural work wishes to change; experienced in shop management and in the economical administration of engineering and estimating departments. Address "Z. A. 18," Engineering News, New York. 18-2t

GRADUATE bridge and structural engineer (42), mathematician, scientific engineer, estimator; wants responsible position; well recommended. Address "I. A. 18," Engineering News, New York. 18-6t

ASSISTANT ENGINEER in charge of drafting room; college graduate; 32; eight years' experience all class... railroad and highway bridges wishes change of location. Address "F. A. 18," Engineering News, New York. 18-3t

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STRUCTURAL and mechanical engineer, graduate, 12 years' experience on structural steel and plate work, conveying and hoisting machinery, mill buildings and industrial plant layouts. Address "I. 19," Engineering News, New York. 19-3t

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YOUNG SURVEYOR, 7 years' experience in field and office, go anywhere; can furnish references. Address P. O. BOX 43, Echo, N. Y. 19-12t

TRANSITMAN, 6 years' experience, construction and field work; best of references; location immaterial. Address "P. A. 13," Engineering News, New York. 13-12t

EXPERT INSTRUMENTMAN, who is also fair draftsman, wants position; ten years' experience. J. G. FROST, Ferguson, Mo. 15-8t

INSTRUMENTMAN, five years' experience on rivers, railroad, sewers and water-works, desires position; reference. Address "D. 14," Engineering News, New York. 18-2t

TRANSITMAN; technical education; three years' experience in field and office work; good draftsman; will go anywhere. Address "R. 19," Engineering News, New York. 19-1t

RODMAN or transitman, 22, five years' field and office experience; also concrete inspection. Address "K. A. 19," Engineering News, New York. 19-1t

YOUNG MAN (25), technical education, three years' engineering experience, transitman and draftsman, desires position; location immaterial. Address "X. A. 14," Engineering News, New York. 19-1t

TECHNICAL GRADUATE, 2 years' experience, field, office, wishes position, chainman, rodman, draftsman, computor; moderate. Address "R. B. 19," Engineering News, New York. 19-1t

Draftsmen.

A DRAFTSMAN with 10 years' shop and office experience, with a good technical education, will be open for engagement June 1st; thoroughly familiar with gas engine, gas producer details and installations; gas producer work preferred. Address "W. 17," Engineering News, New York. 17-3t

POSITION WANTED—Designer or draftsman, fast and accurate man on working drawings, track, concrete and timber; technical graduate (27), 7 years' practical experience on railroad and construction work; can produce results; high-grade references. Address "A. 18," Engineering News, New York. 18-2t

POSITION WANTED—Draftsman or instrumentman, by young man with five years' experience, railroad, interurban and construction; very fast on working drawings and maps; excellent references; location no object. Address "A. B. 18," Engineering News, New York. 18-2t

DRAFTSMAN, experienced detailing, checking, designing; steel and concrete bridges and buildings; foundations. Responsible position desired. Address "S. A. 18," Engineering News, New York. 18-2t

DRAFTSMAN — Young man, experienced structural steel, conveying machinery, etc., desires position; New York location. Address "E. 7," Engineering News, New York. 18-2t

EXPERIENCED CHECKER and detailer on structural steel desires position, N. Y. City. Address "G. 19," Engineering News, New York. 19-2t

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SUPERINTENDENT—Expert manipulator of plain and reinforced concrete, wishes position as superintendent for construction company; cofferdam work a specialty. Address "P. 18," Engineering News, New York. 18-12t

YOUNG MAN, business and executive ability, 10 years' varied experience in structural steel line, desires position with responsibility; will travel. Address "Z. 16," Engineering News, New York. 16-4t

CONTRACTOR'S superintendent or engineer, with fifteen years' experience in foundations, masonry, reinforced concrete, sewers, water-works and railroad construction, Assoc. M. Am. Soc. C. E. Address "Z. A. 16," Engineering News, New York. 16-4t

SUPERINTENDENT OF CONSTRUCTION and engineer of a large dam and power plant now almost completed, will be open for an engagement soon. Address "G. 5," Engineering News, New York. 10-12t

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COLLEGE GRADUATE; good instrumentman, two years with railroad contractors, wants connection with consulting or contracting engineers offering field work or executive opportunity; references. Address "G. A. 18," Engineering News, New York. 18-2t

COMPUTER desires position in charge of intricate computations; no structural experience. Address "E. A. 18," Engineering News, New York. 18-4t

YOUNG MAN, technical education, eight years' experience in general structural and machine design, wishes combination field and office position. Address "P. A. 18," Engineering News, New York. 18-2t

ENERGETIC young engineer, technical graduate, at present employed, would like to connect with an engineer or contractor; best references. Address "L. A. 18," Engineering News, New York. 18-4t

BUILDING SUPERINTENDENT, owing to the near completion of work, desires position; familiar with concrete construction; A1 references. Address "P. 19," Engineering News, New York. 19-2t

COLLEGE MAN with two years' drafting room experience desires position in outdoor line of work with a reliable construction company or engineering firm. Address "X. 19," Engineering News, New York. 19-3t

CONTRACTOR'S ENGINEER or Assist. Superintendent on engineering work; large forces handled successfully; designs, estimates, superintendence; American (28); will go anywhere. Address "G. 15," Engineering News, New York. 19-3t

YOUNG MAN (20), senior at Cooper Union Night School for Civil Engineering, desires position; salary no object if chance for advancement. Address "H. 19," Engineering News, New York. 19-2t

DESIGNER, estimator or Supt. of construction, wide experience in reinforced concrete work, also hydroelectric development; reasons for change given and references furnished. Address "X. A. 16," Engineering News, New York. 19-3t

PRODUCTION ENGINEER, practical—ingenious—systematic, constructive and executive abilities; age 35; open for engagement; $2,500 yearly expected. Address "T. 19," Engineering News, 1636 Monadnock Block, Chicago. 19-1t

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TECHNICAL GRADUATE, age 27, three years' experience in earth and rock moving and concrete work, desires to make change; can furnish best references. Address "A. B. 15," Engineering News, New York. 19-1t

YOUNG MAN, 30 years, surveys, field engineer or inspector, 7 years' varied experience, would like to get started with some engineering or contracting firm or surveyor. Address "L. A. 19," Engineering News, New York. 19-1t

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MAN desires position with builder, 16 years' experience; location of work preferably outside of N. Y. City; references A1. Address "O. A. 19," Engineering News, New York. 19-1t

GRANITE—Manager or superintendent, first-class man with long experience, desires position with concern willing to appreciate ability. Address "W. A. 19," Engineering News, New York. 19-1t

CONTRACTORS' engineer and superintendent; knowledge of costs; open for engagement. Address "P. A. 19," Engineering News, New York. 19-1t

UNDERGRADUATE Mass. Inst. Tech. free June 1 to October 1; inspector pile driving and coffer dam work; time keeper and material man on structural steel; one year as rodman; good letterer. Address "C. A. 19," Engineering News, New York. 19-2t

POSITION in office of contractor or engineer or on work in field by technical graduate (35), experienced as contractors' chief clerk, office man, cost keeper, etc., and as superintendent, material man and time keeper in field; prefer position in middle west. Address "Z. A. 19," Engineering News, New York. 19-1t

HEAD FOREMAN wishes position, macadam road building, concrete walks, culverts, sewers, grading or landscape work; 18 years' practical experience along these lines for best contractors and landscape architects on highways and private estates; best reference; reasonable salary; go anywhere. F. C., Anita Place, Jamaica, N. Y. 19-2t

ASSISTANT SUPERINTENDENT or contractor's engineer by C. E. graduate, six years' construction experience, water power, paper mills, filtration plant, steel plant, railroad, reinforced concrete. Address "O. B. 19," Engineering News, New York. 19-5t

INSPECTOR, with fifteen years' continuous experience, all kinds of construction. Address "M. B. 19," Engineering News, New York. 19-4t

YOUNG MAN, Yale graduate, good address, business training, seeks opening in building or real estate line. Address "I. B. 19," Engineering News, New York. 19-2t

Contractor's Engineer or Superintendent

Energetic American, 33, with 11 years' experience railroad, roads, sewers, paving, concrete construction, topographical and railroad surveys; single; go anywhere; wants position. Address "P. A. 16," Engineering News, New York. 19-1t

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WANTED—Several first-class structural detailers and checkers. Apply by letter, stating experience, age and salary expected. Address "A. B.," Room 1618 Pennsylvania Building, Philadelphia, Pa. 17-3t

ENGINEER'S CLERK WANTED—Smart, clean-cut young man with good education; stenographer and typewriter, neat and methodical, to attend to indexing and filing of records, plans, etc.; some statistical work, some drafting and estimating and some correspondence. Address "K. A. 17," Engineering News, New York. 18-tf

SEVERAL competent Mechanical Draftsmen; those experienced in sugar house design and machinery preferred. State experience fully and give references. PRATT ENGINEERING & MACHINE CO., Atlanta, Ga. 18-2t

WANTED—By large building company high-class engineer for executive position; must have good personality and experience. Personal interview will be required. Address "D. 18," Engineering News, New York. 18-2t

FOREMAN—First class foreman, thoroughly familiar with breakwater work; good position for competent man. Address "B. A. 18," Engineering News, New York. 18-3t

WANTED—Engineer and foreman for gang of men in the country to do grading, sewers, etc.; $21 a week at start; steady work. Address "B. B. 18," Engineering News, New York. 18-2t

WANTED—Several detailers and checkers on structural steel work. Apply HAY FOUNDRY & IRON WORKS, Newark, N. J. 18-2t

WANTED—A young, experienced mechanical draftsman. Address F. B. 18, Engineering News, New York. 18-3t

DRAFTSMEN wanted on general building, structural steel, bins, elevator conveying machinery, etc. Only replies giving experience and full details will be considered. State also age, education, salary, references and when able to report. Address Post Office Box 616, Niagara Falls, N. Y. 18-2t

ASSISTANT CHIEF ENGINEER wanted by interurban railway line in Middle West. Must have experience in power-house work and be capable of taking entire charge if necessary. Address "F. 19," Engineering News, New York. 19-1t

WANTED, for elevator dredge department, graduate mechanical engineer with several years' experience in drawing room. Shop and field experience also essential. Address "B. 19," Engineering News, New York. 19-2t

INSPECTORS—Chief inspector and several assistants wanted; experienced in railway materials, rails, bridge work, structural steel, locomotives, cars, also cement testers. State salary expected, experience in full and references. Address "E. 19," Engineering News, New York. 19-1t

WANTED—An experienced shop inspector. Apply JOLIET BRIDGE & IRON COMPANY, Joliet, Ill. 19-1t

WANTED—Young man to do drafting, computing, and work on general engineering data. State college and year graduated. References. Salary. Address BOX 202, Massena, N. Y. 19-1t

WANTED—Young man with technical education as draftsman on mechanical and construction work. In applying state education, experience and salary expected. Good opening for right man. Address "A. 19," Engineering News, New York. 19-2t

WANTED, at once, engineer experienced in outline surveying and subdivision work, to go to Huntington, L. I. Must be good computer, graduate man preferred. Apply in person only, Room 2434, Park Row Building, N. Y. City, 2 P. M., May 14, 1910 (Only). 19-1t

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WANTED—By an Eastern company, draftsmen, experienced in checking and detailing steel buildings and bridges. Applicants must give full account of experience in detail, stating age, salary desired and when they can report for work. Address "L. B. 19," Engineering News, New York. 19-tf

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WANTED—Salesman, progressive, temperate, to travel in interest of yellow pine lumber and creosoting business. Would like also to hear from successful roadman who has not had above experience. Reply, stating age, nationality, by whom employed, and for how long. Address "M. B. 17," Engineering News, New York. 19-1t

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Supplied Free of Charge
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No charge either to applicants for help or to the laborers.
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'Phone 775 Franklin.
Branch office, Huntsville, N. J.

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Tandem and Three Wheel Rollers
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WANTED.
Work for a Standard Gauge Steam Shovel Outfit
Of latest type, 70-ton shovel; also air dump cars of thirty cubic yards capacity each.
We also have standard gauge air dump cars for rent.
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One 14" x 18" Lidgerwood combined friction drum, hand brake and reversing link motion hoisting engine. Drum 65" dia. x 52" long between flanges, flanges 4½" deep. Drum grooved for 1" rope and takes 48 turns in a single layer. This is an exceptionally fine modern engine of heavy design and is practically new.
FULL DESCRIPTION AND PRICE ON APPLICATION.
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Transits and Levels
Send for list.
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Seventeenth year.
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Marion Steam Shovel
Model G, 2¼ yard dipper. Ready for delivery. In first-class condition. Price, $2,500.00.
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1—10 x 12" D. C. D. D. Haiss Hoisting Engine.
1—2½ yard Williams clam shell bucket, two line.
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1—2 yard Haiss flexible frame clam shell bucket.
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Main Office & Works, 141st St.,
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Contractor's Plant For Sale or Rent
at phenomenally low prices and rates. Don't miss our advertisement on page 47, this issue.
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Steam Rollers
Have both three wheel and two wheel. Address "Contractor," care Engineering News, New York.

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One Lambert Cable Way, 450' Span, 1¼" Cable, 9" x 12" Double Cylinder Engine, complete with Tower, but no Running Lines. Engine in First Class condition. $1,200.00. F. O. B. Long Beach, L. I.
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Two Hayward skid excavators [illegible] dredges. Just thoroughly overhauled in every detail.
One has 1¼ yd. orange peel bucket, [illegible] tural steel boom, 12' x 12' engines; 2 yd. bucket, 65' wooden trussed [illegible] 12¼" x 12¼" engines.
Inspection will show that these are [illegible] you want if you need equipment of this [illegible] —and don't forget, we have locomotive shovels, cars and rails for immediate [illegible] ment.
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THE MOST ECONOMICAL AND BEST WORKING
Shovel on the market.
We now offer for sale, (2), 60 T. Standard gauge Shovels, 2 yd. D. all modern appliances, good as new, used less than one year, they cost $7,500 each; necessity forces us to turn them into cash at once.
PRICE $4,500—10% Dis. FOR CASH
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NEW STEEL RAILS
We have a quantity of new steel rails up to 40 lbs. per yard in weight, which we can offer at attractive figures, for shipment out of stock New York.
Also Frogs and Switches.
Write for prices.
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1 Holly Compound, Duplex, Direct Acting Plunger Pump
12 x 18 x 10¼ x 18, capacity 1,000,000 gal. daily.
1 Worthington Compound, Duplex, Direct Acting Plunger Pump
12 x 18½ x 10¼ x 10, capacity 1,000,000 gal. daily.
Both in good condition and will be sold cheap. Can be examined on premises.
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Cuts 24 inches by 7½ feet deep. Machine now in operation at Painted Post, N. Y. Price and terms easy. Inquire JOSEPH H. CLEMENTS, JR., Schenectady, N. Y. 19-1t

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One 1909 Model
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One-half cu. yd. batch. On trucks with side loader and water tank. Practically new, and a bargain.
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1, 2 or 3 Little Giant 1¼-yd. Steam Shovels on standard gage trucks.
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Infringers are being prosecuted.
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30-Ton Flat Cars
51-Ton Mogul Locomotives
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Parties contemplating establishment of a new industry, or extension of an old, will find it to their advantage to investigate sites adjacent to the Wabash.

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ASSISTANT GENERAL FREIGHT AGENT
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IRON WORKERS' MACHINERY FOR SALE

List of Machinery.	Cost Price.
1—set of power bending rollers, 10 ft. between housings, capacity ⅝" plate belt driven	$950.00
1—No. 5 Reed Architectural Jaw Punch, right angle drive, capacity ¾" hole in ⅝" metal	500.00
1—No. 5 Long & Allstatter splitting shear, C. S. frame, capacity ⅝" plate	350.00
1—Heavy flue hole drill on overhead hanging frame	125.00
1—No. 2 Lennox Bevel Shears	800.00
1—12" Higley Cold Saw	350.00
1—15 ft. power bending clamp	750.00
1—Allen Boiler Riveter, 8' reach	725.00
1—Chicago Pneu. Tool Co. 1¾" x 6" riveter and frame	200.00
1—Heavy hand lever punch, 16" throat, capacity 13/16" hole in 5/16" steel, on wheels	125.00
1—Rapid Power Punch, capacity 5/16" holes in ¼" plate	125.00
1—Long & Allstatter Plate Splitting Shear, capacity splitting ⅝" plate, trimming ½" plate	350.00
1—Betts Machy. Co. Rotary Planer, 24" head, 4 ft. travel. Second hand purchase price	375.00
1—Horizontal tubular boiler, 60" x 14 ft. Complete fittings, Reliance water column, 3" Scott pop and smoke consumer	750.00
1—8 ft. hand bending clamp	75.00
1—Bolt Cutter, second hand	90.00
1—20" drill press	100.00
1—Emery Wheel Stand, 1¾" Mandrel, countershaft	75.00
1—Emery Wheel Stand, 1" Mandrel	25.00
1—No. 6 American Blower Co. Forge Fan Blower, mounted on base frame with countershaft	80.00
1—No. 6 American Blower Co. Forge Fan Blower	50.00
1—35 HP. Foos Gas Engine, 300 R. P. M.	1,000.00
1—19 HP. Otto Gas Engine, 240 R. P. M.	600.00
1—3 HP. Motor, 4 pole direct current	100.00
1—5 HP. Bi-polar direct current motor	200.00
1—Wheel boring mill	1,000.00
1—Axle turning lathe	1,000.00

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DETROIT, MICHIGAN 18-3t

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Address TROY PUBLIC WORKS COMPANY
R. W. SHERMAN, President — UTICA, N. Y.

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Immediate Shipment.

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Each of two million gallons capacity. These pumps were built for a party who failed. We will sell at half value.

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35—2-way, 1¼-yard, 30 inch gauge
Instant delivery. Way below cost for quick cash sale.

1 THEW TYPE "O" STEAM SHOVEL
but little used; practically new; prompt delivery.

2 BUCYRUS 70-ton Shovels. Good order. High shop numbers.

2 MARION MODEL 20's. Fine condition. Little used.

THEW TYPE "O" Traction Shovel; good as new; immediate delivery.

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Depends upon the use you make of your opportunities. We are offering wonderful bargains in Machinery and General Merchandise.

Send us an inquiry.

"WE CAN SAVE YOU MONEY"

MISCELLANEOUS MACHINERY

1—Doty Mfg. Co. Power Driven Punch and Shear.
1—Single Head Horizontal Boring Machine, Wood Frame.
1—8 Ft. Niles, Single Head Boring Mill.
4—Link Belt Coal Crushers.

PUMPS

1—14 × 8½ × 10 Duplex Laidlow Dunn.
1—12 × 7 × 12 Duplex Smith Vail.
1—10 × 6 × 10 Duplex Deane.
1—8 × 12 × 12 Duplex Smith Vail.
10—6 × 4 × 6 Duplex Deane.
12—4½ × 2¾ × 4 Duplex Deane.
10—3 × 2 × 3 Duplex Deane.

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Capacity, 4,500 to 6,500 gallons. These tanks were used only a short time in railroad service. Very heavy construction—¼" steel with 5-16" heads; domes in proportion to size of tank, and fitted with 15" screwed manhole. We will give them rigid inspection and paint before shipment. Prompt shipment can be made from points South, East and West.

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1—15½ × 16 Armington & Sims C. C. Automatic Engine.
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2—80 Horse-power Erie City Economic Return Flue Boilers, 95 lbs. pressure.
24—78 × 20 Tubular Boilers, 115 lbs. pressure.
15—72 × 20 Tubular Boilers, 100 lbs. pressure.
2—72 × 18 Tubular Boilers, 95 lbs. pressure.

TANKS

12—1,000 gallon capacity tanks.
42—1,500 gallon capacity tanks.
6—3,000 gallon capacity tanks.
15—3,000 gallon capacity tanks.
2—3,800 gallon capacity tanks.

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The largest and most complete line of Structural Steel and Iron in the world, consisting of I-beams, channels, angles, T's, columns, truss rods, joint anchors, girders, sill plates, sidewalk lights, coal hole covers, new and relaying rails, bridge work, etc. We cut to any size, punch, rivet and fabricate as far as practical, and deliver all ready to assemble, at a saving to you of 30 to 60 per cent. Send us a plan of the work you have in view, and let us make you an estimate.

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1—No. 1 Smith Mixer, on trucks with gasoline engine.
1—No. 2 Smith Mixer, on skids, with engine.
1—No. 2 Smith Mixer, on trucks, with engine and boiler.
1—No. 2½ Smith mixer, on trucks, with engine and boiler.
1—No. 2 Chicago Mixer, on trucks, with 15 H.P. boiler and 12 H.P. engine and power loader.
1—No. 3 Ransome Mixer on trucks with engine and batch hopper, and boiler on separate skids.
1—No. 22 Cube Mixer, on skids with engine and superhopper.

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1—Lidgerwood Hoisting Engine, 6¼ x 10, 16 H.P., D. C. D. D., complete with boiler and fittings.
2—Lidgerwood Hoisting Engines, 7 x 10, 20 H.P., D. C. D. D., complete with boiler and fittings.
1—American Hoisting Engine, 7 x 10, 20 H.P., D. C. D. D., with swinging gear, complete with boiler and fittings.
1—Mundy Hoisting Engine, 6½ x 12, 20 H.P., D. C. D. D., complete with boiler and fittings.

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1—10 ton Iroquois Roller (rebuilt at shop, good as new.)
2—McMyler Whirlies, first class condition.
18—3 yard 36 inch gage Western 2 way dump cars.
1—No. 2 Warrington Steam Pipe Hammer.
1—American Hoist & Derrick 66 foot mast, 60 foot boom, 14 x 14 inch sticks, guy derricks, complete with bull wheel.
20—4 yard standard gage Oliver two way dump cars.
24—12 yard standard gage Oliver two way dump cars.
25—40,000 lbs. capacity 34 foot box cars.
50—50,000 lbs. capacity 34 foot flat cars.

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1—Style "A" Marion, 45 ton, 1½ yd. dipper.
1—70 ton Vulcan, boom pattern.
1—Little Giant Special, No. 1 condition.
1—Model 60 Marion.

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4—0 x 14 Porter Dinkeys, 36" gage.
2—9 x 14 Dickson Dinkeys, 36" gage.
1—10 x 16 Porter Dinkey, 36" gage, 18 ton.
2—10 x 16 Porter Dinkey, 36" gage, nearly new.

Also 50 flat cars 40, 50 and 60,000 lbs. capacity, 1½, 3, 4, 6 and 12 yd. dump cars. Ten (10) 60,000 lbs. capacity flats 36' 10" long.

Correspondence requested.

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No. 600, Dumping Bucket

Dumping Buckets
Turntables Wheels and Axles
Portable Track
Switches Rail

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FOR SALE.

2—Y-7 Sullivan Channellers, with Boilers, Steel to 16' 4", Track and Tools Complete. New 1909. Price, each $2,250.00 complete.

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2—8¼" × 10" DC DD Lidgerwood Skeleton Hoisting Engines, with a No. 4 Swinging Gears. Each, $650.00.

All above can be inspected at Lockport, N. Y.

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FOR SALE.

A Manufacturing Plant

in large eastern city equipped for the manufacture of a high-grade engineering specialty and broad patents for the same. Good business already developed and established and very large prospects. A wonderful opportunity. Excellent reason for selling. Address "C. 19," Engineering News, New York. 19-1t

FOR SALE.

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Capacity 1½ cu. yds., 30-inch gauge. Cars in good order. Also 1,500 feet of Arthur Koppel portable track, 2 curves and 2 switches. Rail, 16-lb. track, 30-inch gauge. Can be seen on State Rifle Range, Blauvelt, N. Y., West Shore R. R.

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New and With Boilers.	Rebuilt, Without.
8½ x 10 D.C. D.D.	8½ x 12 D.C. D.D.
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6½ x 10 D.C D.D.	7 x 10 D.C. D.D.
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5½ 8 Lambert swinger.	7-HP. Dake swinger.

Inquiries Solicited.

CARLIN MACHINERY and SUPPLY CO., 225 Sandusky St., N. S., Pittsburgh, Pa.

FOR SALE

1—Williamson Bros. 4-drum hoist, A1, at $450.
1—Davidson Single Pump, brass fitted, 12 x 6 x 12 at $80.00.
1—Worthington Duplex Pump, packed pistons, 12 x 7 x 10, at $125.

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FOR SALE.

Hayward Land Dredge

With two Orange Peel Buckets, ¾-yard and 1-yard; ready to use.

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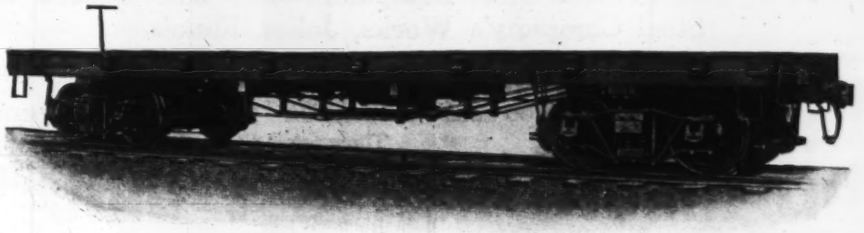

110 Standard Flat Cars, 50,000 lbs. Capacity, 36 feet long. M. C. B. Specifications. Equipped with Air and Hand Brakes. Also Aprons if desired	Our Selling Price F.O.B. McCook, Ill. Or, Beatrice, Neb. EACH	Cost When New F.O.B. Factory EACH
	$262.00	$378.00
2 Lidgerwood Unloaders, 25 ton pull	2,500.00	4,000.00
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3 Left Hand Side Plows	300.00	407.00
4 18 x 24 50 Ton Mogul Locomotives	4,000.00	5,000.00
2 11 x 16 50 Ton Shay Locomotives	5,500.00	7,800.00

This is only a few items of the many bargains we have to offer in all kinds of contractors' equipment.

Remember, we own this plant and guarantee its condition.

UNITED STATES EQUIPMENT COMPANY

Fisher Building, - - - - CHICAGO

FOR SALE.

1—65-ton 2½-yd. Bucyrus Shovel.
1—Improved "A" Marion Shovel.
1—Style "A" Marion Shovel.
1—Giant "D" Boom Vulcan Shovel.
3—9 x 14, 36" gauge Porter Locomotives.
1—9 x 14, 36" gauge Vulcan Locomotive.
1—No. 2 Ransom Concrete Mixer, mounted.
1—McKelvey Concrete Mixer, mounted.
1—Svenson Continuous Mixer, mounted.
1—Russell Steam Road Roller.
40 tons of 45 pound relaying rails.
75 tons 50 pound relaying rails.
20—36" gauge one-way dump cars.
1—1¼-yard Hayward Clam Shell Bucket.
Several new hoisting engines, various sizes.
1—No. 4 Champion Crusher with engine and boiler mounted.
Large assortment of Oregon Fir Timber.
Complete line of derrick fittings.

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For sale, one 10 x 16

Vulcan Locomotive

36" gage, almost new, only used six months. Address the J. CONNELLY CONSTRUCTION COMPANY, 409 Schofield Building, Cleveland, Ohio.

FOR SALE.

HYDRAULIC DREDGE

20-inch Hydraulic Dredge.

F. S. LEWIS,
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FOR SALE.

No. 1 Vulcan Special Traction

Revolving Steam Shovel

with adjustable boom. Shop No. 1420. Only used about thirty days on small job

HENRY P. BURGARD COMPANY,
Buffalo, N. Y. 18-2t

FOR SALE OR RENT
Hoisting Engines.
Guy and Stiff-Leg Derricks.
Complete Driving Outfits.
Direct-Connected Centrifugal Pumps.
Complete Stone-Crushing Plants.
Air-Compressors and Pile Drivers.
MARVIN BRIGGS, Inc.
167 Sixth St., Brooklyn, N. Y.

MUST BE SOLD AT ONCE

Marion Shovel, 1½ yd., Style A.
Vulcan 9 x 14 Locomotive 36" (1905)
12—4-yd. Diamond frame 1-way cars.
No reasonable offer refused.

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ROBINSON & ORR, Pittsburg, Pa.
☞We have for sale a number of good second-hand Locomotives.

FOR SALE.

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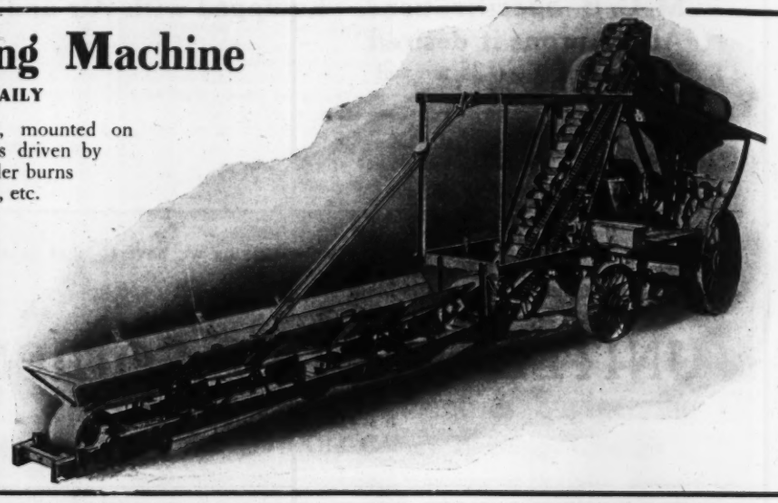

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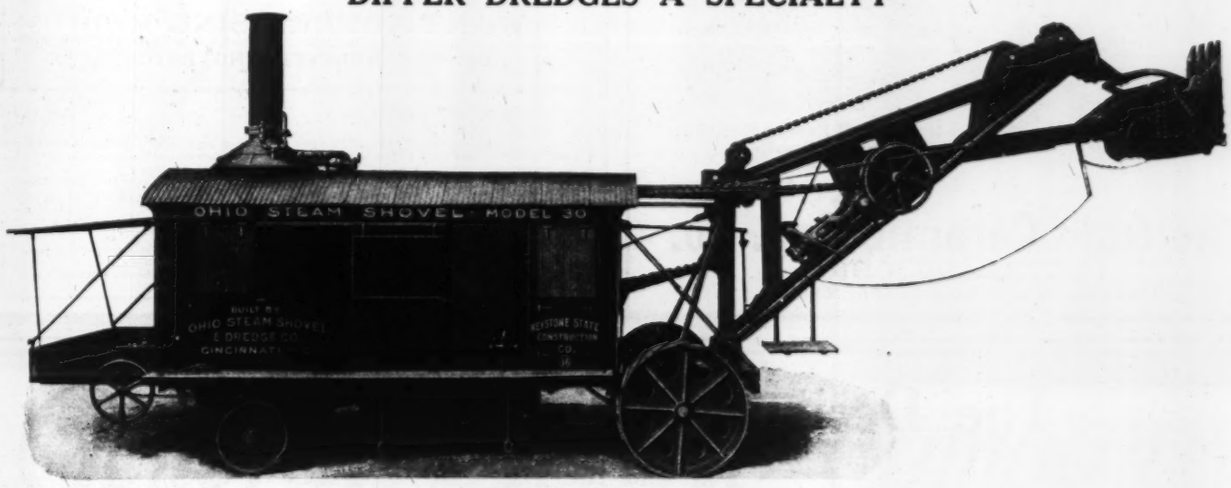

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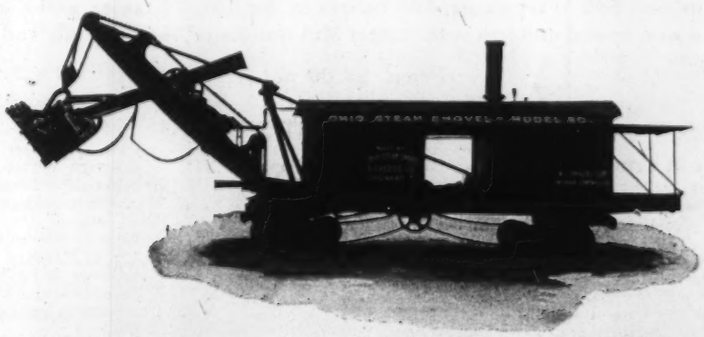

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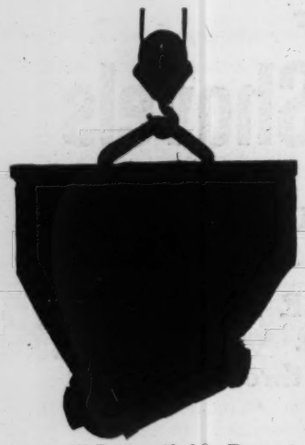

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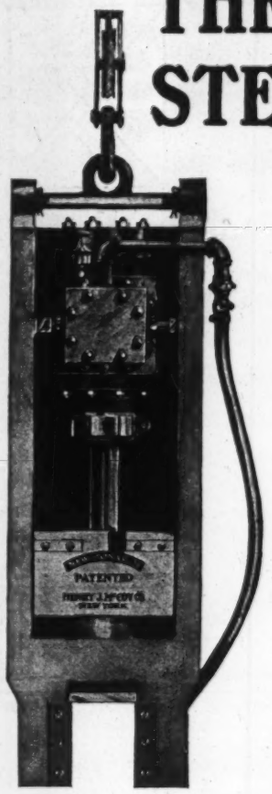

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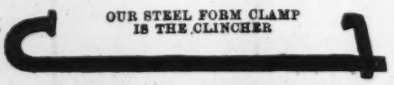

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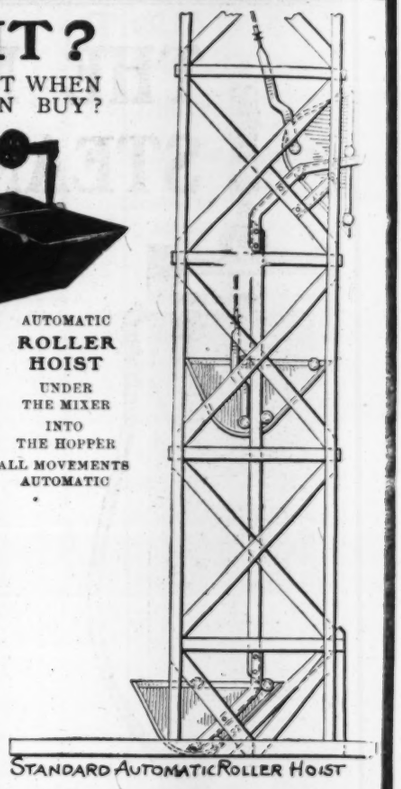

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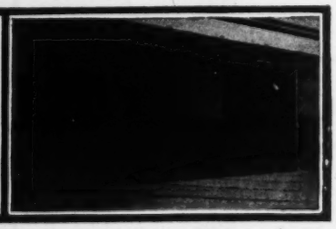

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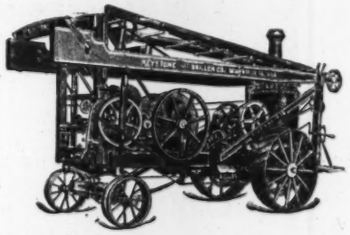

Catalog No. 4

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" 21. Special Planimeter for Type M Chart Records.
" 23. Type D Register with Chart Recorder.
" 33 Type M Indicator-Recorder.
" 63. Type M Indicator-Register-Recorder.

Any or all of these we shall be pleased to mail upon request

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Aluminum Wire and Cables (bare and insulated) for Electrical Conductors

Aluminum Company of America, Pittsburgh, Pa.

Formerly The Pittsburgh Reduction Co.

STONE ROAD.

Elizabeth, N. J.

Sealed proposals will be received by the County Road Committee of the Board of Chosen Freeholders of the County of Union, at the Court House, Elizabeth, New Jersey, at 2.30 P.M., on Wednesday, the 18th day of May, 1910, for the construction of a stone road of either Asphalt Macadam, Amiesite, Warrenite, Filbertine or Headley Road Co.'s Binders, on Madison Hill Road and Palisade Avenue, extending from Lake Avenue to Westfield Avenue, in the Township of Clark and the City of Rahway.

The length of said road is 2.388 miles and the width of stonework sixteen (16) feet.

Estimate of quantities (main items):

Excavation, 27,910 cubic yards.

Macadam, 22,880 square yards.

Plans, profiles and specifications can be examined at the office of the State Commissioner of Public Roads, State House, Trenton, N. J., and at the office of F. J. Hubbard, County Engineer, 201 Park Avenue, Plainfield, New Jersey.

Each bid must be accompanied by a certified check in the sum of $1,000.00 as a guarantee of good faith on the part of bidders.

The said Board of Chosen Freeholders or its Committee reserves the right to refuse or reject any or all bids, as they may deem best for the interests of the County.

HENRY KROUSE, Chairman,
County Road Committee.

F. J. HUBBARD,
County Engineer.
201 Park Avenue, Plainfield, N. J.

CAST-IRON WATER PIPES.

New Britain, Conn.

The City of New Britain will receive proposals for laying about three miles of heavy cast-iron high-service piping, twenty-inch to twelve-inch, with valves and hydrants. Bids will be entertained only from contractors of experience in laying water pipes, and specifications can be obtained at the office of the Water Board, City Building, West Main St., New Britain, Conn., where plans of the proposed work may be seen. Bids will be received until 12 o'clock noon of Tuesday, May 17, and the Board reserves the right to reject any or all bids or to accept any bid, as may seem advantageous to the interests of the City.

H. DAYTON HUMPHREY,
P. J. EGAN,
WILLIAM B. ROSSBERG,
Board of Water Commissioners.

PERCY M. BLAKE,
Chief Engineer.

New Britain, Conn., April 30, 1910.

RESERVOIR.

New Britain, Conn.

The City of New Britain, Conn., will receive proposals for the construction of a 3,000,000-gallon reservoir to be located on high land within the city limits. Bids will be received only from contractors of successful experience and record in such work. Specifications and plans may be seen at the office of the Water Board, City Building, West Main Street, New Britain, Conn., and all bidders must visit the site of the work in person. Bids must be filed at the office of the Board on or before 12 o'clock of Tuesday, noon, May 17. No plans or specifications will be sent on application. The Board reserves the right to reject any or all proposals received or to accept any proposal, as it may deem best for the interests of the City.

H. DAYTON HUMPHREY,
P. J. EGAN,
WILLIAM B. ROSSBERG,
Board of Water Commissioners.

PERCY M. BLAKE,
Chief Engineer.

New Britain, Conn., April 30, 1910.

ELECTRIC LIGHTING SYSTEM.—Office of the Constructing Quartermaster, Fort Morgan, Alabama, April 23, 1910.—Sealed proposals in triplicate will be received at this office until 1.30 p. m., May 23, 1910, for the construction of an electric lighting system at Fort Morgan, Ala. Plans, specifications, blank proposals and further information furnished on application. A deposit of $10.00 is required for drawings and specifications, deposit will be returned to the bidder upon return of drawings here. Plans and specifications may be seen at this office. The United States reserves the right to reject or accept any or all bids or any part thereof. Proposals to be marked "Proposals for Electric Lighting System" and addressed to CAPTAIN H. B. CHAMBERLIN, Quartermaster, U. S. Army, Constructing Quartermaster.

Automatic Air Lock and Siphonic Apparatus
OF EVERY DESCRIPTION
(Miller & Adams' Patents)
For Operating Bacterial Sewage Filters, Septic Tank System of Sewage Disposal
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Manufacturers of Riveted Steel Pipe PITTSBURG OFFICE, Westinghouse Building
NEW YORK OFFICE, 50 Church Street

PAVING.

Boise City, Idaho.

Sealed bids will be received by the Board of Public Works of Boise City, Idaho, for paving with either Asphalt, Bitulithic, Vitrified Brick, Concrete or Granitoid (with Oil Macadam along street car tracks) in the streets and parts of streets in Paving District No. 15, approximating 160,000 square yards, with necessary excavation and gutters. Said bids will be received up to Saturday, May 28th, 1910, at four o'clock P. M., and publicly opened by the Board of Public Works on the same day, at eight o'clock P. M., in the City Hall of said City.

Said pavement to be laid and constructed according to plans and specifications which may be seen at the office of the City Engineer.

Each bid must be in accordance with form of proposal furnished by the Board of Public Works, and accompanied by a certified check, payable to Boise City, for the sum of One Thousand ($1,000.00) Dollars on one of the Banks in Boise City, Idaho, to be forfeited if the successful bidder fails to enter into contract and furnish bond, acceptable to the Board of Public Works, for the sum of twenty-five (25%) per cent. of total amount of his bid for the faithful performance of each and every covenant in the contract.

The right is reserved to reject any and all bids.

By order of the Board of Public Works of Boise City, Idaho, this 27th day of April, 1910.

KARL PAINE,
President Board of Public Works.

WATER AND SEWER BONDS.

Stigler, Okla.

Bids will be received by the Town of Stigler on or before the 17th day of May, 1910, for forty-five thousand 6% twenty-five year Water-Works Bonds and thirty thousand 6% twenty-five year Sewer Bonds.

Said City reserves the right to reject any or all bids received.

C. T. MITCHELL,
President of Board of Trustees.

L. G. CALLAWAY, Clerk.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., April 23, 1910.—Sealed proposals will be received at this office until 3 o'clock P. M., on the 6th day of June, 1910, and then opened, for two additional steam freight elevators at the U. S. Appraisers' Warehouse, New York, N. Y., in accordance with drawing No. E-232 and the specification, copies of which may be had at this office or at the office of the Superintendent and Chief Engineer of Public Buildings, New York City, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

A postal will bring gratis DATA on **SHOVELS**

THE WYOMING SHOVEL WORKS, Wyoming, Pa.

SHEDS.

New Orleans, La., April 20th, 1910.

Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans, at their office Nos. 601-602 Hibernia Bank & Trust Co. Building, until Friday, May 20th, 1910, at 1.30 o'clock P. M., for the fabrication and erection of the structural steel and cast iron for any or all of the following sheds:

EIGHTH-HARMONY STREET SHED No. 2.
SIXTH STREET SHED.
THIRD STREET SHED.
SORAPARU STREET SHED.
BRANCH M. KING SHED.

Deposit: One Thousand Dollars (1,000.00) Cash or certified check.

Payment: Eighty per cent. (80%) monthly.

Bond: In full amount of contract.

Plans, specifications, proposal forms, etc., prepared by J. F. Coleman & Co., Engineers, are on file at the office of the Engineer, A. C. Bell, No. 606 Hibernia Bank & Trust Co. Building, New Orleans, La., by whom full sets will be furnished on deposit of Twenty-five ($25.00) Dollars, the said deposit will be returned upon the safe return of said set in good order.

The right is reserved to reject any or all bids.

HUGH McCLOSKEY,
President.

FORT MEADE, S. D., May 2d, 1910.—Sealed proposals, in triplicate, will be received here until 10 A. M., Mountain Time, June 1st, 1910, for constructing Concrete Dam and clearing reservoir site, in connection with Fort Meade, S. D., water system. Plans and specifications may be seen at offices of Chief Quartermaster, Dept. of the Missouri, Omaha, Nebr.; Dept. of the Colorado, Denver, Colo.; Dept. of the Lakes, Chicago, Ill.; Dept. of Dakota, St. Paul, Minn., and this office, at which latter place all information may be obtained on application. A deposit of $10.00, to insure return, is required before plans are sent on individual application. Envelopes containing proposals should be endorsed "Proposals for Dam" and addressed to Constructing Quartermaster.

U. S. ENGINEER OFFICE, Cincinnati, Ohio, April 28, 1910.—Sealed proposals for constructing hull of one maneuver boat will be received here until 2 p. m., May 18, 1910, and then publicly opened. Information on application. J. G. WARREN, Lt. Col., Engrs.

STREET IMPROVEMENTS.

Westfield, N. J.

Sealed proposals for constructing street improvements in the Town of Westfield, N. J., will be received by the Council of the Town of Westfield, N. J., at the Town Rooms, 121 Prospect Street, Westfield, N. J., on Monday, May 16, 1910, at 8:15 P. M.

The Engineer's approximate estimate of quantities is as follows:

6,500 cu. yds. of excavation.
20,900 sq. yds. of 6-in. macadam.
20,100 sq. yds. of 4-in. macadam.
8,300 lin. ft. of combination concrete curb and gutter.
2,900 lin. ft. 6 × 18-in. concrete curb.
4,000 lin. ft. 3-in. underdrain.
800 lin. ft. 4 × 20-in. bluestone curb.
660 lin. ft. culverts.

Each proposal must be accompanied by a certified check for $1,000.00, payable to the order of the Treasurer of the Town of Westfield, signed by the bidder and without conditions or endorsement of any kind, as an evidence of good faith, and the successful bidder will be required to furnish a bond of $15,000.00 with sureties acceptable to the Council, to guarantee the faithful performance of the contract.

The Council reserves the right to reject any or all bids.

Duplicate plans and forms of proposal, specifications and contract may be obtained at the office of A. W. Vars, Town Surveyor, 121 Prospect Street, Westfield, N. J.

LLOYD THOMPSON,
Town Clerk.

Dated April 18, 1910.

BRIDGE.

DEPARTMENT OF PUBLIC WORKS,
BUREAU OF SURVEYS,
OFFICE 412 CITY HALL.
Philadelphia, April 29, 1910.

Sealed proposals, endorsed "Bids for a Bridge," and addressed to the undersigned, at the office above mentioned, will be received until 12 o'clock, noon, on Tuesday, May 17th, 1910, for Schedule A., Bridge on line of Fox Street, over the Norristown Branch of Philadelphia and Reading Railway. Steel I-beam Bridge encased in concrete, on concrete abutments and piers. 60 feet wide. One span 30 feet and two spans 18 feet each.

Plans for the above work will be exhibited in the office of Bureau of Surveys, Philadelphia.

Specifications and blank forms upon which bids must be made, will be furnished upon application to the Chief Engineer, Room 416 City Hall.

Bidders must be skilled and regularly engaged in the class of work bid for.

No bid will be considered unless accompanied by a certificate from the City Solicitor, that the provisions of an ordinance requiring proposal bonds when the bids exceed in amount five hundred dollars, approved May 25, 1880 (p. 81, West), have been complied with.

The Director reserves to himself the right to reject any or all bids, as he may deem best for the interests of the city.

GEO. R. STEARNS,
Director.

WATERPROOFING.

Asheville, N. C., April 30, 1910.

Sealed proposals will be received at the office of the City Clerk until May 13th, 1910, for waterproofing a 5,000,000-gallon concrete reservoir, built by the Faragher Engineering Co. For full information apply to B. M. Lee, City Engineer. The City reserves the right to reject any or all bids.

J. A. CAMPBELL,
Mayor.

PROPOSALS FOR SCREENS AND METAL WEATHER STRIPS.—War Department, Office of the Constructing Quartermaster, New London, Conn., April 27th, 1910.—Sealed proposals for furnishing and installing screens and metal weather strips on ten buildings at Fort H. G. Wright, N. Y., and ten buildings at Fort Terry, N. Y., will be received here until 10.00 A. M., May 20th, 1910, and then opened. Information furnished on application. Envelopes containing proposals should be indorsed "Proposals for Screens and Weather Strips" and addressed CAPT. F. T. ARNOLD, Constructing Quartermaster, New London, Conn.

For other
PROPOSAL ADVERTISEMENTS
See pages 51, 52, 54, 56, 58 and Construction News, page 204.

"PROGRESS IN SEWAGE TREATMENT."—No. 6

CONTAINING

A Report on Automatic Sewage Lifting Station Equipment

THE PRIESTMAN EJECTOR

This is a valuable and interesting edition dealing with the subject of sewage raising, and is a comparison of sewage ejectors and centrifugal pumps.

A request on a postal card will bring it and your name will be placed on our mailing list for future issues.

MERRITT & COMPANY

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Manufacturers of The Priestman Ejector, Merritt Siphon Flush Tanks, Water Power Sewage Lifts, Aerlock Alternating and Sequence Siphons and Aerlock Distributing Apparatus.

"THERMIT" BUTT-WELDED PIPE JOINTS

THESE joints form the best type of connection for pipe lines carrying

AMMONIA
HIGH PRESSURE STEAM
COMPRESSED AIR
HYDRAULIC POWER
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ACIDS AND CHEMICALS

They are especially valuable where the pipe lines are laid in trenches, as, once installed, they require no further attention. They do not leak and are as strong as the pipe itself. One man can handle all the materials for welding pipe up to 2 inches in diameter; for welding larger pipe, 2 men are required.

No outside power of any kind is required. All the appliances are light and portable and maybe **BROUGHT TO THE JOB.** It is possible, therefore, to weld the joints **ANYWHERE.**

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432-436 Folsom St. San Francisco, Cal.
103 Richmond St. W., Toronto, Ont.

THE ARNOTT PILE HAMMER

Drives any kind of wood and steel piling for sewer excavations, shafts, retaining walls, dams and building foundations. It can be operated by either steam or compressed air without resetting the valves when changing from one to the other. The hammers are made in eight sizes, from 300 to 9500 pounds in weight.

The frame or body is in one casting and forms the cylinder, valve chest and guides, and encloses the ram and valve mechanism, so that nothing is exposed but the inlet valve or throttle.

In view of the rough usage that contractors' equipment is subjected to, the advantages of this hammer are evident.

The piston which actuates the ram receives the steam or air at both ends, so that the fall of the ram is accelerated by the pressure.

UNION IRON WORKS, Hoboken, N. J., U. S. A.

Manufacturers of Concrete Buckets and all kinds of Contractors' Equipment.

Write for Catalogue "F"

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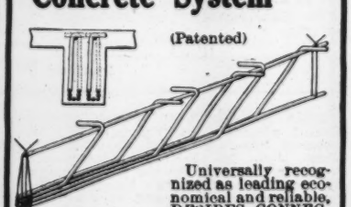

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Main Office:
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EXPANSION & TOGGLE BOLTS For fastening all kinds of material to stone and brickwork.

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"K & J" CARS

Are Built for "Continuous Service"

CAPACITY 25 TONS

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Shop and Yard CARS

All are specially built to fit the work you have for them.
Send us your specifications and we'll be glad to quote you.

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The Kilbourne & Jacobs Mfg. Co.

Columbus, Ohio

New York, 25 Broad Street

No. 325

STONE ROAD.

Elizabeth, N. J.

Sealed proposals will be received by the County Road Committee of the Board of Chosen Freeholders of the County of Union, at the Court House, Elizabeth, New Jersey, at 2.30 P.M., on Wednesday, the 18th day of May, 1910, for the construction of a stone road of either Asphalt Macadam, Amiesite, Warrenite, Filbertine or Headley Road Co.'s Binders, on Raritan Road and Lake Avenue, extending from Terrill Road to Palisade Avenue in the Townships of Fanwood and Clark.

The length of said road is 2.465 miles and the width of stonework sixteen (16) feet.

Estimate of quantities (main items):

Excavation, 32,374 cubic yards.
Macadam, 23,900 square yards.

Plans, profiles and specifications can be examined at the office of the State Commissioner of Public Roads, State House, Trenton, N. J., and at the office of F. J. Hubbard, County Engineer, 201 Park Avenue, Plainfield, New Jersey.

Each bid must be accompanied by a certified check in the sum of $1,000.00 as a guarantee of good faith on the part of bidders.

The said Board of Chosen Freeholders or its Committee reserves the right to refuse or reject any or all bids, as they may deem best for the interests of the County.

HENRY KROUSE, Chairman,
County Road Committee.
F. J. HUBBARD,
County Engineer,
201 Park Avenue, Plainfield, N. J.

PAVING.

Columbus, Indiana.

Bids will be received until 7.30 o'clock p. m., June 6, 1910, for paving 7,000 sq. yds. on Third street, with brick, asphalt, bitulithic or creosoted wood block.

EDWIN A. COBB,
City Clerk.
WM. H. RIGHTS, City Engineer.

CONSTRUCTING QUARTERMASTER'S OFFICE, Whipple Barracks, Arizona, May 10, 1910.—Sealed proposals, in triplicate, subject to the usual conditions, will be received here until 3.00 P. M., May 31, 1910, and then opened for furnishing labor and material required for the construction of a quartermaster storehouse at Whipple Barracks, A. T. Blanks and further information upon application here. The U. S. reserves the right to accept or reject any or all bids. 2D LIEUT. G. G. BARTLETT, 18th Infantry, Constructing Quartermaster.

SEWERS.

Westfield, N. J.

Sealed proposals for constructing sanitary sewers and appurtenances in the Town of Westfield, N. J., will be received by the Council of the Town of Westfield, N. J., at the Town Rooms, 121 Prospect Street, Westfield, N. J., on Monday, May 16, 1910, at 8:15 P. M.

The Engineer's approximate estimate of quantities is as follows:

11,600 lin. ft. of 8-in. vitrified pipe sewer.
60 lin. ft. 8-in. cast-iron pipe sewer.
21 Manholes.
460 Branches.
10 Combined flush tanks and manholes.
3 Drop connections.
10 Extension connections.

Each proposal must be accompanied by a certified check for $500.00, payable to the order of the Treasurer of the Town of Westfield, signed by the bidder and without conditions or endorsement of any kind, as an evidence of good faith, and the successful bidder will be required to furnish a bond of $5,000.00 with sureties acceptable to the Council, to guarantee the faithful performance of the contract.

The Council reserves the right to reject any or all bids.

Duplicate plans and forms of proposal, specifications and contract may be obtained at the office of A. W. Vars, Town Surveyor, 121 Prospect Street, Westfield, N. J.

LLOYD THOMPSON,
Town Clerk.

Dated April 18, 1910.

CATSKILL AQUEDUCT.

CONTRACT 44.

New York, N. Y.

Sealed bids will be received by the Board of Water Supply at its offices, seventh floor, 165 Broadway, New York, until 11 A. M., on May 24, 1910, for Contract 44, for furnishing, delivering and installing six 6-foot by 15-foot sluice-gates, twenty-five 5-foot by 13-foot sluice-gates, four 5-foot by 8-foot back pressure sluice-gates, seven 5-foot by 8-foot sluice-gates, six 5-foot by 6-foot sluice-gates, three 4-foot by 5-foot sluice-gates, eight 3-foot by 5-foot sluice-gates, three 30-inch by 42-inch sluice-gates, two 18-inch by 24-inch sluice-gates, with operating mechanisms, 2 sets of drive-shafting and all appurtenances, complete, and in every respect ready for use, at Ashokan, Kensico and Hill View reservoirs, and in various structures along Catskill aqueduct.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and pamphlets of contract drawings can be obtained at the above address, by depositing the sum of ten dollars ($10) for each pamphlet. For further particulars see Information for Bidders.

JOHN A. BENSEL,
President.
CHARLES N. CHADWICK,
CHARLES A. SHAW,
Commissioners of the Board of Water Supply.

FORT MONROE, VA., April 26th, 1910.—Sealed proposals, in triplicate, will be received until 10:00 A. M., May 27th, 1910, for the construction, including plumbing, heating, electric wiring and fixtures, of nine double sets of non-commissioned officers' quarters, at Fort Monroe, Va. Deposit of certified check for $25 required as guaranty return of plans and specifications. Bidders on proposals must state name of manufacturers supplying them material. Information on application. Plans and specifications may also be seen at Office Chief Quartermaster, Department of the East, Governor's Island, N. Y. The United States reserves the right to accept or reject any or all proposals or any part thereof. ERNEST R. TILTON, Captain & Q. M., U. S. A., Constg. Q. M.

For other PROPOSAL ADVERTISEMENTS See pages 51, 52, 54, 56, 58 and Construction News, page 204.

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have been used by 600 contractors upon sewer work. CATALOG.
CARSON TRENCH MACHINE COMPANY :: :: :: **Boston**

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A good article is worth its price—Our No. 1 are No. 1
Recollections of quality remain long after matter of price is forgotten.

HENRY MAURER & SON, 422 East 23d St., New York

The Best for the U. S.

The Government, in strong competition, decides in favor of

The Oliver 19 yd. Air Dump Car

and orders 250

(This order was increased to 300 after the excellent construction of this type of car was fully gone into.)

300 MEANS APPROVAL, NOT TRIAL

The Oliver Air Dump Car

is the simplest, most efficient and economical car of its class on the market, because the power is directly applied to the car body and all chains, sheaves and shafts are eliminated. A recent test on railroad coustruction work showed it capable of dumping towards the high side of a curve, a maximum load heaped as high as possible on the opposite side of the car. The ease in handling such a load and the quick response of the air mechanism under normal train pipe air pressure, showed the ample power and efficiency of that feature of the car.

It is the high standard of Oliver equipment that has always counted.

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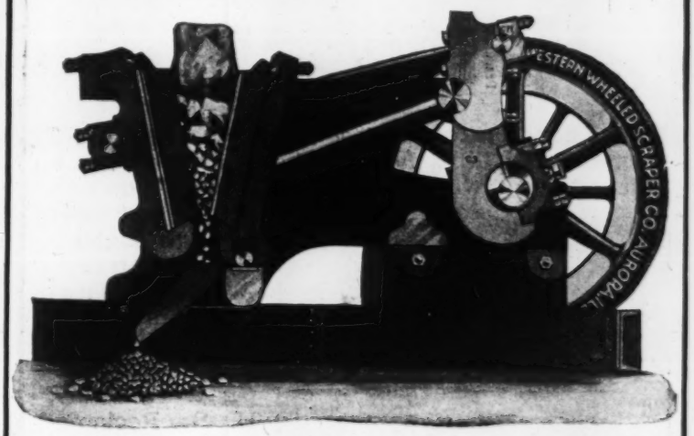
Aurora Steel Rock Crusher

Castings of Steel. Unbreakable.



Especially suited to contractors' use. Light, making it readily portable. Maximum product with minimum power. Adjustable to various sized stone. Furnished with high wheels when so ordered, adapting it for hauling over rough ground.

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Earth and Stone Handling Machinery, Aurora, Illinois.

Garbage Disposal Plants

DRYERS, CONDENSERS AND PERCOLATORS
ELEVATORS, CONVEYORS AND TANKS

Complete Plants for Large or Small Cities

THE C. O. BARTLETT AND SNOW CO.

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Jim Fellowes Talk

I have noticed that price is not the really important question in the sale of Dump wagons.

A much more important question is this:—"Will the user buy the same wagon once, twice, three times—year after year? The men who use the Watson do this.

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970 Old Colony Bldg., CHICAGO, ILL.

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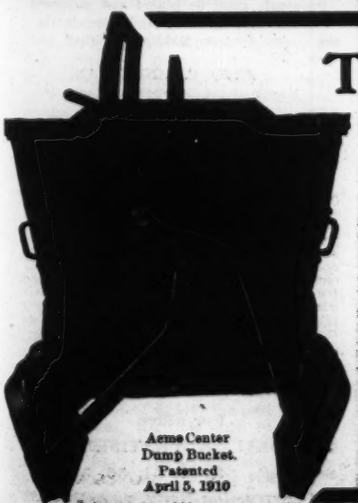
NATIONAL FIRE PROOFING COMPANY

FULTON BUILDING-PITTSBURGH, PENN

They "Eat Up" Work

AND THEY ANNIHILATE TIME AND LABOR COSTS

DOUD'S BUCKETS



Acme Center Dump Bucket. Patented April 5, 1910

No "fussiness" about them. Just plain, common sense design. Practical in every way. Center Dump. Controllable Discharge. No springs. No slides.

They were in evidence at the Cement Show; they ought to be a part of your equipment.

CARE FOR INFORMATION?

The Acme Equipment and Engineering Co.

6824 Union Avenue, Cleveland, Ohio

SELLING AGENTS

The Barron & Cole Co. New York City
The Pierce-Walton Co. Philadelphia, Pa.
Wm. B. Hough Co. Chicago, Ill.
The J. F. Donahoo Co. Birmingham, Ala.
The Chas. F. Beebe Co. Portland, Oregon

These Buckets are Patented. All Infringers and Purchasers from Other Manufacturers will be Prosecuted.

Doud's Controllable Discharge Bucket. Patented.

Steel Centers for Concrete Construction

Patented The Blaw System Patented

Makes concrete conduit construction easy. Contractors save time, labor and money, and get a finished job which is perfect. Used on all the important work throughout the country. Catskill Aqueduct, Panama Canal, Charles River Basin, Philadelphia Subway, U. S. Reclamation Service, Louisville Sewerage System, etc.

120 Inch Half Round Blaw Center USED BY
ANDREW W. BYRNE
Hartford, Conn.

The Experience of the Pioneer Steel Center Builders at Your Service

Write for Bulletins

Another Blaw Success—Special Steel Culvert Mould on a Sale Basis

Address Dept. C

Blaw Collapsible Steel Centering Co.

General Offices: Westinghouse Building, PITTSBURGH, PA.
Branch Office: Park Row Building, NEW YORK CITY

Parsons Trench Excavator

Havana, Cuba, December, 1909.

MAXIMUM RESULTS—MINIMUM EXPENSE

PARSONS EXCAVATORS are always sold subject to approval. If we can't demonstrate to your satisfaction that the machine will dig your trenches at a great saving of money, we don't want you to keep the machine. But we know it will do all and more than we guarantee.

PARSONS EXCAVATORS dig any width between 28 and 78 inches, and any depth desired, with no change of parts and in any soil, except solid rock.

WE SELL—DO NOT LEASE

GEO. L. LAMBERT, Sales Manager.

THE G. L. PARSONS COMPANY, Newton, Iowa.

MACADAM ROAD.

Montvale, N. J.

Sealed proposals will be received by the Mayor and Council of the Borough of Montvale, Bergen Co., New Jersey, at 9.00 P. M., on the 28th day of May, 1910, at Linderman's Hall, Montvale, N. J., for the grading and macadamising a portion of Magnolia Avenue, a distance of 0.904 miles.

Plans and specifications can be examined at the office of the State Commissioner of Public Roads, State House, Trenton, N. J., and at the office of H. G. Hering, Jr., Borough Engineer, Hillsdale, N. J.

Each bid must be accompanied by a certified check in the sum of $1,000.00 as a guarantee of good faith on the part of the bidders.

The Mayor and Council reserve the right to reject any or all bids.

Proposals must be sealed and endorsed "Proposal for grading and macadamizing Magnolia Avenue."

FRED. C. LINDERMAN,
Mayor of the Borough of Montvale.

Attest:
JOHN B. HERING,
Borough Clerk.

SEWERS.

Hackensack, New Jersey.

Sealed proposals will be received by the Hackensack Improvement Commission at the Commission Rooms, 193 Union Street, Hackensack, on Friday, May 20th, 1910, at 8 o'clock P. M., for the construction of Sewers in Central and Railroad Avenues, consisting of about

670 feet 24-inch Pipe Sewer.
735 feet 21-inch Pipe Sewer.
485 feet 18-inch Pipe Sewer.
430 feet 8, 10 and 12-inch Pipe Sewer, together with manholes, catch-basins and other appurtenances.

Also, for a pipe sewer in Old Hoboken Road and Jackson Avenue, consisting of about

1,000 feet 18-inch Pipe Sewer, together with manholes, catch-basins and other appurtenances.

Plans and specifications can be seen and blank forms of proposals obtained at the office of the Hackensack Improvement Commission, 193 Union Street, and at the office of Lemuel Lozier, Engineer, Bank Building, Main and Mercer Streets, Hackensack.

All proposals must be made upon the blank forms furnished.

A certified check for the sum of Five Hundred Dollars ($500.00) drawn to the order of the Hackensack Improvement Commission must accompany each proposal offered for the construction of the sewer in Central and Railroad Avenues as surety that contract will be entered into if proposal is accepted.

Also, a certified check for the sum of Two Hundred and Fifty Dollars ($250.00) must accompany each proposal for the construction of the Old Hoboken Road and Jackson Avenue Sewer. A Surety Company bond equal to 50% of the amount of the contract will be required in each contract.

The Hackensack Improvement Commission reserves the right to reject any or all bids.

HENRY B. STAGG,
President.

JACOB BAUER,
Secretary.

BRIDGE.

Winnipeg, Man.

Sealed tenders addressed to the Chairman Board of Control, Winnipeg, and marked on the envelope "Tenders for Brown and Brant Street Bridge," will be received at the office of the undersigned up to 11 o'clock A. M., on TUESDAY, JUNE 28th, 1910, for the following works:

(a) Construction of Concrete Piers to be completed on or before the fifteenth day of November, 1910.

(b) Erection of Steel Superstructure and floors, with two lines of Street Railway tracks, to be completed on or before the first day of June, 1911.

Plans, specifications and forms of tender, together with conditions governing tenders as prescribed by by-law, may be obtained at the office of the City Engineer, Winnipeg. The lowest or any tender not necessarily accepted.

M. PETERSON,
Secretary.

Office of the Board of Control,
Winnipeg, April 30th, 1910.

FOR 30 YEARS our machines have been used upon sewer work. Write us.
CARSON TRENCH MACHINE COMPANY :: :: :: **Boston**

DRAINAGE CANALS.

State Capitol, Tallahassee, Florida.

Sealed proposals will be received by the Board of Drainage Commissioners of the State of Florida until 10 o'clock A. M., Wednesday, June 15th, 1910, when they will be opened and read publicly, for excavating five drainage canals in the Everglades. The aggregate length of these canals is 235 miles and their construction requires the excavating of approximately 18,000,000 cubic yards of earth and 6,000,000 cubic yards of rock.

Specifications, and blank forms upon which bids must be made, can be obtained by application to the Engineer's office at Tallahassee. No bid will be considered unless accompanied by a certified check for 2% of the amount of said bid, payable to W. V. Knott, State Treasurer, as a guarantee that the party awarded the work will execute a proper contract and bond acceptable to the Board of Drainage Commissioners within 15 days.

Checks of unsuccessful bidders will be returned to them immediately after awarding the contract. Checks of successful bidders will be retained by the Board until a proper contract is signed and approved by the Board.

The Board reserve the right to reject any or all bids.

J. O. WRIGHT,
Chief Drainage Engineer.

Approved by the Board of Drainage Commissioners,
J. C. LUNNIG, Secretary.

Maps, profiles and specifications may be seen at the office of Engineering News.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., May 2, 1910.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 9th day of June, 1910, and then opened, for the construction complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the United States Post Office at Middletown, N. Y., in accordance with drawings and specification, copies of which may be obtained from the Custodian of site at Middletown, N. Y., or at this office, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

MACADAM ROAD.

Montvale, N. J.

Sealed proposals will be received by the Mayor and Council of the Borough of Montvale, Bergen Co., New Jersey, at 8.30 P. M., the 28th day of May, 1910, at Linderman's Hall, Montvale, N. J., for the grading and macadamizing of Grand Avenue, Middletown Road, and Blue Hill Road, a total distance of 1.301 miles.

Plans and specifications can be examined at the office of the State Commissioner of Public Roads, State House, Trenton, N. J., and at the office of H. G. Hering, Jr., Borough Engineer, Hillsdale, N. J.

Each bid must be accompanied by a certified check in the sum of $1,000.00 as a guarantee of good faith on the part of the bidders.

The Mayor and Council reserve the right to reject any or all bids.

Proposals must be sealed and endorsed "Proposal for grading and macadamizing Grand Avenue, Middletown Road and Blue Hill."

FRED. C. LINDERMAN,
Mayor of the Borough of Montvale.

Attest:
JOHN B. HERING,
Borough Clerk.

PROPOSALS FOR CONSTRUCTION OF AN ICE PLANT.—Constructing Quartermaster's Office, Whipple Barracks, Arizona, April 30, 1910.—Sealed proposals, in triplicate, will be received here until 3.00 P. M., May 31, 1910, and then opened, for furnishing labor and material required for the construction of an Ice Plant at Whipple Barracks, Arizona. Blanks and further information upon application here. The U. S. reserves the right to accept or reject any or all proposals. 2ND LIEUT G. G. BARTLETT, 18th Infantry, Constructing Quartermaster.

For other
PROPOSAL ADVERTISEMENTS
See pages 51, 52, 54, 56, 58 and Construction News, page 204.

Digging a Ditch to Templet

Ditch Being Dug with Sloping Banks—An Austin Drainage Excavator Ditch

is not an idealism, it is an economic necessity. An engineer designs a ditch cross-section of certain relative depth, grade of bottom and slope of bank because his skilled knowledge tells him that that particular cross-section is the best one. An Austin Drainage Excavator reproduces that cross-section by templet in the earth. It performs this work in one operation without moving an extra inch of soil, so the contractor gets paid for all his excavation. It performs it by carving the ditch from the natural soil so that washing and caving are a minimum. It performs it automatically, travelling along the work by its own power. It is the only ditching machine that is adapted to both drainage work and irrigation work. *Send for Catalogue "C."*

A Ditch That Was Not Dug with Sloping Banks—This Is Not An Austin Drainage Excavator Ditch

OUR FULL LINE COMPRISES:

The Austin Drainage Excavator — The Austin Drag Line Excavator — The Austin Highway Ditcher — The Austin Rolling Platform Traction — The Austin Stump Puller and Grubber
The Austin Levee Builder — The Austin Side Hill Ditcher — The Austin Orange Peel Ditcher — The Austin Tile Ditcher

WE SELL OUTRIGHT OR LEASE DRAINAGE MACHINERY

F. C. AUSTIN DRAINAGE EXCAVATOR COMPANY, Railway Exchange, Chicago, Ill.

N. B.—AGENTS WANTED IN UNOCCUPIED TERRITORY.

GARBAGE DESTRUCTOR.

Vancouver, B. C.

Tenders will be received by the undersigned up to 3 P. M., Tuesday, the 31st day of May, 1910, for the installation of a garbage destructor plant at the Bridge Street yard on the south side of False Creek in the City of Vancouver, British Columbia. The plant must be capable of destroying not less than seventy tons of mixed garbage per day of twenty-four hours. Tenderers will be required to submit plans and specifications with their proposals and furnish a satisfactory bond and guarantee that the destructor will fulfill all the provisions of the specifications. The tendered price is to include the erection of the stack and all necessary buildings. A deposit of an amount equal to five (5) per cent. of the contract price must be made with each tender by marked cheque payable to the City Treasurer. The lowest or any tenders not necessarily accepted.

W. McQUEEN, City Clerk.

DRAINAGE.

Colville, Wash.

Sealed proposals will be received by the undersigned Drainage Commissioners of Drainage District No. 2, of the County of Stevens of the State of Washington, at the office of W. M. Manning, Colville, Washington, Engineer for said Drainage District, up until 2 o'clock P. M., Monday, May 16, 1910, at which place and hour said bids will be opened and read, for the construction of a proposed Drainage improvement in said district from Station O to Station No. 579, said improvement to consist of the construction of a ditch or canal, about 11 miles in length. Said work shall be performed in accordance with the plans and specifications now on file in the office of said engineer, where they may be seen by proposers. Copies of said plans and specifications may be obtained from the said engineer at Colville, Washington, upon payment of $10.00, the cost of producing them. Each bid shall be accompanied by a certified check in a sum equal to 5% of the amount bid, payable to William Miller, Clerk of said Board of Drainage Commissioners, as security to enter into a contract and to furnish bonds required by statute if award is made upon the bid of the contractor furnishing the certified check.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds with sufficient sureties conditioned for the faithful and accurate performance of said contract in full for the completed work, and for the payment of all labor, materials, tools, merchandise, provisions and all other expenditures incurred by said contractor in the construction of said improvement.

Monthly estimates will be paid of 75% of the work done at the contract price.

The right is reserved to reject any or all bids, or to award the contract as may be deemed for the best interests of said Drainage District.

Proposals shall be enclosed in sealed envelopes and marked "Proposal for Construction of Drainage Improvement."

D. J. BURK,
WM. MILLER,
WM. COMPTON,
Drainage Commissioners of Drainage District No. 2, of the County of Stevens of the State of Washington.

Colville, Wash., April 16, 1910.

BOILERS.

Perth Amboy, N. J.

Sealed bids and proposals will be received on Wednesday, May 18th, 1910, by the Board of Water Commissioners of the City of Perth Amboy, N. J., at the City Hall, at 8.30 P. M., for furnishing complete in place at pumping station, Runyon, N. J., two 200 HP., 175 lbs. steam pressure, water-tube boilers, in accordance with the standard specifications of the Hartford Steam Boiler Insurance Co. The brick work on front face of setting to be white enameled brick.

All bids must be accompanied by a certified check drawn to the order of the City Treasurer for $500.00.

Forty working days will be allowed for the completion of the work.

The Board reserves the right to reject any or all bids as may best serve the City's interests.

By order of the Board of Water Commissioners.

A. H. CROWELL,
Superintendent.

ROAD WORK.

Trunk Line Rockland to Rockport, Me.

Sealed proposals for building a section of state road about five and four-tenths miles in length in the city of Rockland and the town of Rockport will be received by the State Commissioner of Highways at Augustus, Maine, 2 o'clock P. M., May 24, 1910, at which time and place they will be publicly opened and read.

Plans may be seen, specifications, forms of contract and proposal blanks may be obtained at the office of the State Commissioner of Highways, State House, Augusta, Maine, and no proposal will be considered unless made on said proposal blank.

Each bidder must accompany his bid with a certified check payable to Paul D. Sargent, State Commissioner of Highways, for 10 per cent. of the amount of the bid.

The successful bidder will be required to furnish a bond as provided by the state road law.

The right is reserved to reject any and all bids.

Proposals should be endorsed Rockland to Rockport Trunk Line and addressed to

PAUL D. SARGENT,
State Commissioner of Highways,
Augusta, Maine.

MACADAM ROAD.

Montvale, N. J.

Sealed proposals will be received by the Mayor and Council of the Borough of Montvale, Bergen Co., New Jersey, at 9.30 P. M., on the 28th day of May, 1910, at Linderman's Hall, Montvale, N. J., for the grading and macadamizing Summit Avenue, a distance of 4,100 feet.

Plans and specifications may be examined at the office of H. G. Hering, Jr., Borough Engineer, Hillsdale, N. J.

Each bid must be accompanied by a certified check in the sum of 10% of the amount bid as a guarantee of good faith on the part of the bidders.

Proposals must be sealed and endorsed "Proposal for grading and macadamizing Summit Avenue."

FRED. C. LINDERMAN,
Mayor of the Borough of Montvale.
Attest:
JOHN B. HERING,
Borough Clerk.

ROAD WORK.

Somerville, N. J.

The Board of Chosen Freeholders of the County of Somerset, New Jersey, will meet at the Court House in Somerville, N. J., in said county, on Thursday, May 26, 1910 at 10.00 o'clock A. M., and up to 10.30 o'clock of said day will receive, and after the latter hour, publicly open and read, bids for grading and macadamizing seven (7) roads in said county, aggregating 15 18/100 miles in length.

Bids for *each* road must be accompanied by a certified check for $1,000.00, payable to the order of Thomas E. Gibson, Director.

The contracts will be awarded subject to the approval of the State Commissioner of Public Roads.

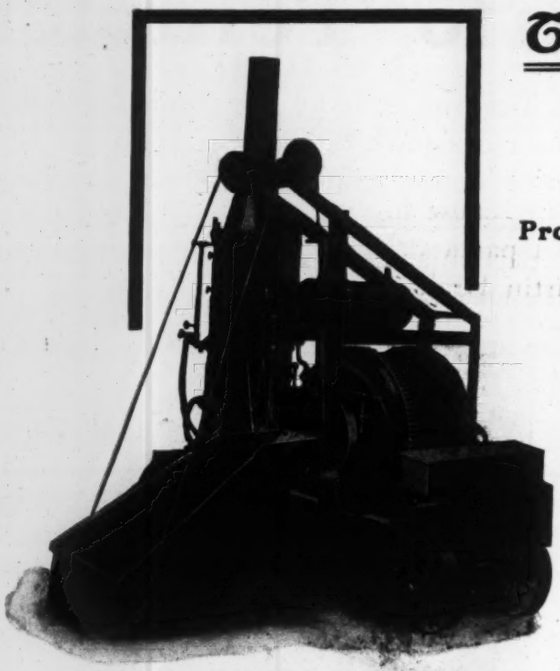
Plans, profiles and specifications may be seen and bidding and detail sheets obtained at the office of the State Commissioner of Public Roads, State House, Trenton, N. J., and at the office of Joshua Doughty, Jr., Engineer, 22 Elm Avenue, Somerville, N. J.

By order of the Board of Chosen Freeholders of Somerset County.

THOMAS E. GIBSON,
Director.
Somerville, N. J.

FORT DUPONT, DELAWARE CITY, DEL., April 21, 1910.—Sealed proposals, in triplicate, will be received here until 11.00 a. m., May 23, 1910, for furnishing and installing two 75 horse-power water tube boilers, one feed pump, one feed water heater, new steam and exhaust mains, and making certain removals and changes in pumphouse, at Fort DuPont, Del. Information furnished upon application. Plans and specifications can be seen here and also in the Office of the Chief Quartermaster, Dept. of the East, Governor's Island, N. Y. A certified check in sum of $5.00 required on plans and specifications loaned, to insure their safe return. U. S. reserves right to accept or reject any or all bids or any part thereof. Envelopes containing bids should be endorsed "Proposals for Boilers, etc.," and be addressed to "CONSTRUCTING QUARTERMASTER, Fort DuPont, Delaware City, Del."

For other PROPOSAL ADVERTISEMENTS See pages 51, 52, 54, 56, 58 and Construction News, page 204.



No. 1 B. on trucks, equipped with Elevating Charging Bucket and Water Measuring Tank

The KOEHRING Concrete Mixer

Produces Uniform Concrete with Greatest *ECONOMY*

This Machine is **Designed Right Built Right**

***The* KOEHRING** is equally efficient on large and small jobs.

***The* KOEHRING** is no imitation of the "So-Called" "Superior" types of Mixers, but is a Mixer that has

Common-Sense Construction and Mechanism

It will withstand every test which a contractor may put it to, and will convince the most skeptical of its superiority in actual usage.

Catalogues R and S Describe Fully

Koehring Machine Co. - Milwaukee, U. S. A.

FRED. O. JOHNSON, 70 KILBY ST., BOSTON, MASS., NEW ENGLAND AGENT

HIGHWAYS.

NOTICE TO CONTRACTORS.—State of New York, office of the State Commission of Highways, Albany, N. Y.—Pursuant to the provisions of Chapter 30, Laws of 1909, sealed proposals will be received by the undersigned at their office, No. 55 Lancaster St., Albany, N. Y., at one o'clock P. M. on Friday, the 27th day of May, 1910, for the improvement of the following highways:

County.	Road No.	Name of Road.	Approx. miles.
Albany	849	Altamont Village	1.10
Cattaraugus	5,066	Olean-Hinsdale, Part 1	2.94
Chautauqua	5,067	Falconer Village	1.06
Chenango	5,057	Norwich Village	.51
Clinton	5,056	Keeseville-Ansable Chasm	2.28
Clinton and Essex	859	Keeseville Village	1.24
Cortland	5,058	Homer Village	2.01
Cortland	738	Cortland-Truxton, Part 1	6.51
Delaware	145—R	Delaware River	1.00
Erie	5,061	Williamsville Village	1.06
Erie	525—A	State Farm	.59
Erie	862	Hamburg Village	.97
Erie	863	Blasdell Village	1.06
Erie	866	Aurora-Glenwood, Sec. I.	2.01
Erie	751	Aurora-Glenwood, Sec. II	7.07
Fulton	5,065	Northville Village—North	2.43
Herkimer	5,060	Herkimer Village	.77
Herkimer	5,004	Middleville Village—Newport Village	1.57
Montgomery	864	Fultonville Village and Fonda Village	.90
Niagara	5,063	Niagara Falls—Buffalo, Part I.	2.50
Oneida	5,059	Whitesboro Village	1.60
Orange	414	Scotts Corners—Burnside	5.54
Orleans	393	Oak Orchard, Part II	3.61
Saratoga	5,062	Ballston Spa—Ballston Lake	2.74
Saratoga	611	Malta—Saratoga	6.54
Warren	843	Lake George Village	.17
Warren	5,068	Lake George Village	1.48
Wayne	860	Clyde—Resont, Part II	3.48
Wayne	861	Dugway, Part IV	1.98
Westchester	865	Mt. Kisco Village	3.01

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Commission in Albany, N. Y., and at the offices of the following division engineers: For the counties of Orange and Westchester, at the office of Division Engineer Spencer J. Stewart, Columbus Hall, Poughkeepsie, N. Y.; for the counties of Albany, Clinton, Essex, Fulton, Montgomery, Saratoga and Warren, at the office of Division Engineer H. P. Willis, Humane Bldg., Albany, N. Y.; for the counties of Herkimer and Oneida, at the office of Division Engineer Guy H. Miller, Cleveland Bldg., Watertown, N. Y.; for the counties of Chenango, Cortland and Wayne, at the office of Division Engineer Fred. W. Sarr, South Clinton and West Jefferson Sts., Syracuse, N. Y.; for the counties of Cattaraugus, Chautauqua, Erie, Niagara and Orleans, at the office of Division Engineer M. W. Wilbur, 423 Cutler Bldg., Rochester, N. Y., and for the county of Delaware, at the office of Division Engineer Paul McLoud, 47 Court St., Binghamton, N. Y.

The especial attention of bidders is called to "Information for Proposers" on pages 6 and 7 of the specifications.

Proposals for each road must be presented in a separate sealed envelope endorsed on the outside with the name and number of the road for which the proposal is made. Each proposal must be accompanied by a New York draft or certified check payable to the order of the State Commission of Highways for an amount equal to at least five per cent. of the amount of the proposal which such draft or check accompanies. This draft or check will be held by the Commission until the contract and bond are duly executed.

The successful bidder will be required to give a bond for fifty per cent. of the amount of the contract; such bond to be executed by a Surety Company to be approved by the Commission, or a bond secured by the deposit of collateral securities to be approved by the Commission.

The right is reserved to reject any or all bids.

S. PERCY HOOKER,
Chairman;
T. WARREN ALLEN,
ROBERT EARL,
Commissioners.

CONCRETE-STEEL BRIDGE.

City of Dayton, Ohio.

Sealed proposals will be received at the office of the Secretary of the Department of Public Service, Dayton, Ohio, until 12 o'clock, noon,

WEDNESDAY, MAY 25TH, 1910,

for the construction of a concrete-steel bridge, Melan System, over the Great Miami River at Stewart Street, Dayton, Ohio.

The bridge will be of 7, 86 ft. span, arches.

Total length, 653 feet.

Roadway, 40 feet.

Sidewalks, 9 feet.

Plans and specifications may be obtained by sending a written request, accompanied by a certified check for $25, to the Secretary of the Department of Public Service. Check will be returned upon return of plans. Or plans and specifications may be examined in the office of the Concrete Steel Engineering Company, Park Row Building, New York, N. Y.

J. C. ELY,
Director of Public Service.
F. J. CELLARIUS,
City Civil Engineer,
WILLIAM A. BUDROE,
Secretary, Department of Public Service.
19-2t

CATSKILL AQUEDUCT.

CONTRACT 80.

New York, N. Y.

Sealed bids will be received by the Board of Water Supply at its offices, seventh floor, 165 Broadway, New York, until 11 A. M., on May 24, 1910, for Contract 80, for the construction of the Breakneck tunnels, portions of the Hudson River division of the Catskill aqueduct, comprising about 710 feet of plain concrete conduit known as aqueduct in open cut, or cut-and-cover aqueduct, 17 feet high by 17 feet 6 inches wide inside, and a tunnel on the hydraulic gradient about 1,055 feet long, 17 feet high by 13 feet 4 inches wide inside, connecting by a shaft about 590 feet deep with a deep pressure tunnel 14 feet inside diameter and about 700 feet long. The work is located in the towns of Fishkill, Dutchess County, and Phillipstown, Putnam County, N. Y.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders and pamphlets of contract drawings can be obtained at the above address, by depositing the sum of ten dollars ($10) for each pamphlet. For further particulars see Information for Bidders.

JOHN A. BENSEL,
President.
CHARLES N. CHADWICK,
CHARLES A. SHAW,
Commissioners of the Board of Water Supply.

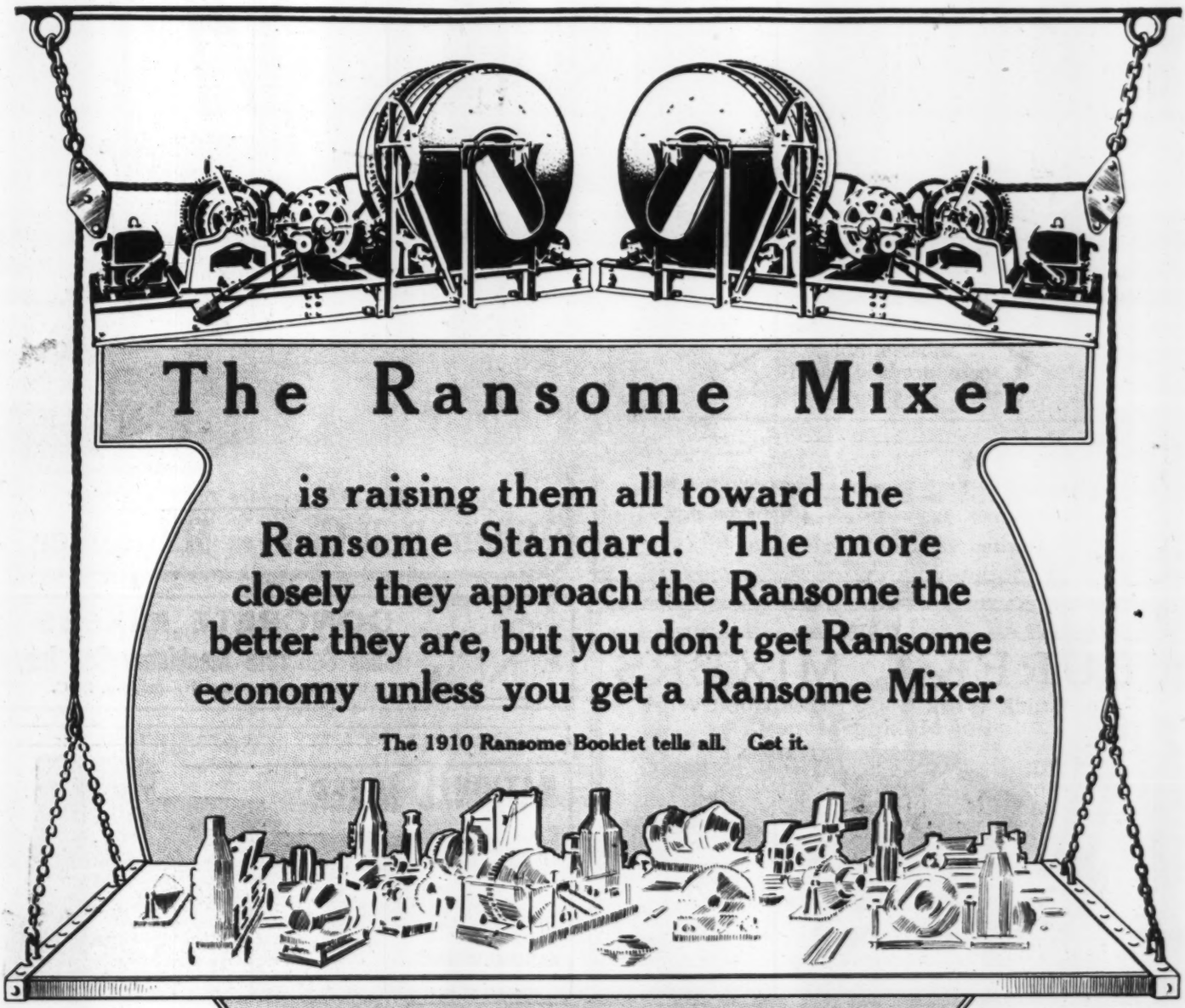
ASPHALT PAVEMENT CONSTRUCTION.

Winnipeg, Man.

Sealed tenders addressed to the Chairman of the Board of Control, Winnipeg, Man., and endorsed on the envelope "Tenders for Asphalt Pavement Construction," will be received at the office of the undersigned up to 11 a. m. on Thursday, May 19, 1910, for the construction of approximately 97,000 square yards of asphalt pavements on concrete foundation. Specifications and forms of tender, together with conditions governing tender as prescribed by By-law, may be obtained at the office of the City Engineer, Winnipeg. The lowest or any tender not necessarily accepted.

M. PETERSON,
Secretary.
Board of Control Office,
Winnipeg, Man. May 4th, 1910.

For other PROPOSAL ADVERTISEMENTS See pages 51, 52, 54, 56, 58 and Construction News, page 204.


The Ransome Mixer
is raising them all toward the Ransome Standard. The more closely they approach the Ransome the better they are, but you don't get Ransome economy unless you get a Ransome Mixer.
The 1910 Ransome Booklet tells all. Get it.
The Ransome Concrete Machinery Co.
Dunellen, N. J.

FOOTE BATCH MIXERS

Made by Foote Mfg. Co., Nunda, N. Y., also manufacturers of the Foote Continuous Mixer

CUT OUT HIGH WHEELING AND CUT DOWN COST

There are others cheaper in first price, but none as cheap in the end

The most simple, compact and rapid-operating power loading device

ADDRESS THE NEAREST AGENT:

FOOTE CONCRETE MACHINERY CO., 182 La Salle Street, CHICAGO
(Western and Southern Agents)

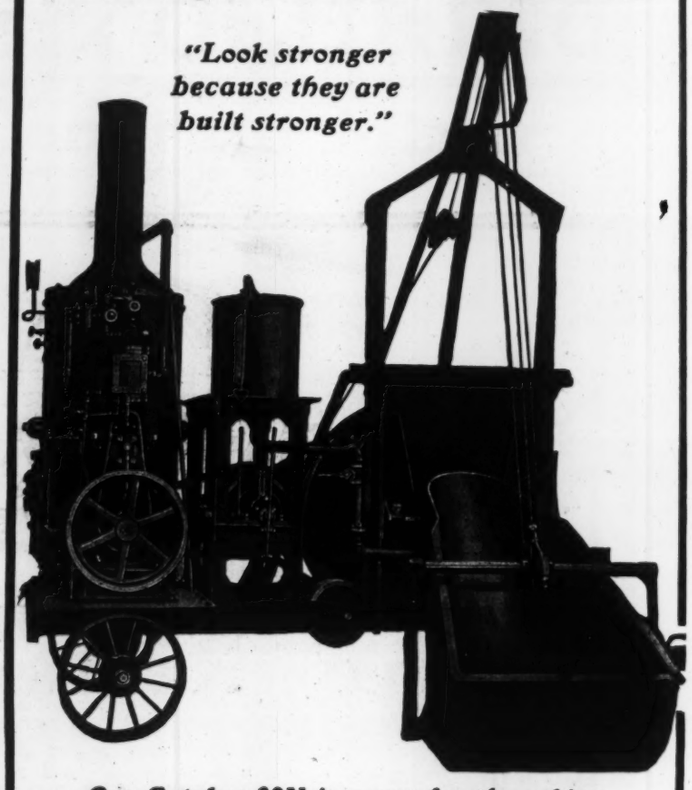
E. J. McHARG & COMPANY, 3 Crandall Street, BINGHAMTON, N. Y.
(Ohio, Eastern Michigan and Western Penna. Agents)

W. H. WILCOX CO., 16 Moffatt Avenue, BINGHAMTON, N. Y.
(Eastern Agents)

HALLIDIE MACHINERY COMPANY, Seattle;
(Pacific Coast Agents)

Chain Belt Mixers

"Look stronger because they are built stronger."



Our Catalog 39N is yours for the asking

Chain Belt Co., - Milwaukee

USE

EUREKA MIXERS

For Quick Work For Good Work
For Making Money

In use everywhere by successful contractors. Ask for positive proof.

Also Mortar Mixers

EUREKA MACHINE CO.

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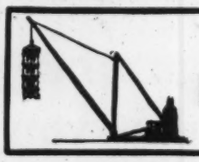

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Hains Concrete Machinery Co., Inc.

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NATIONAL MIXER

dependable for reinforced concrete. Our force plunger feed measures accurately. Our drum mixes like a batch mixer. Will save you money on any job. Send for catalog and price.

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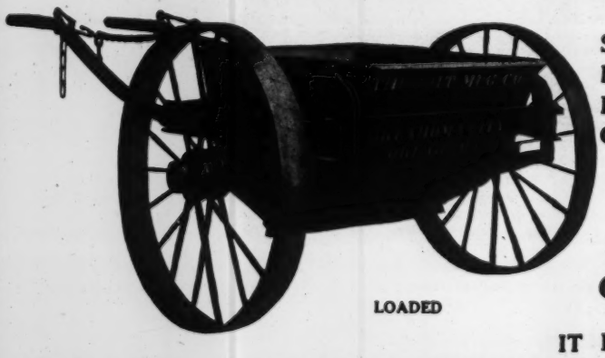

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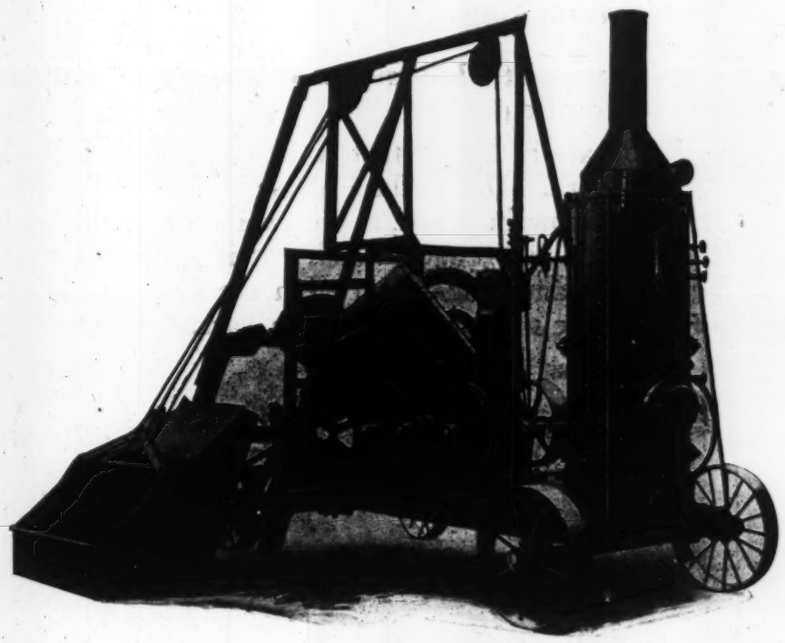
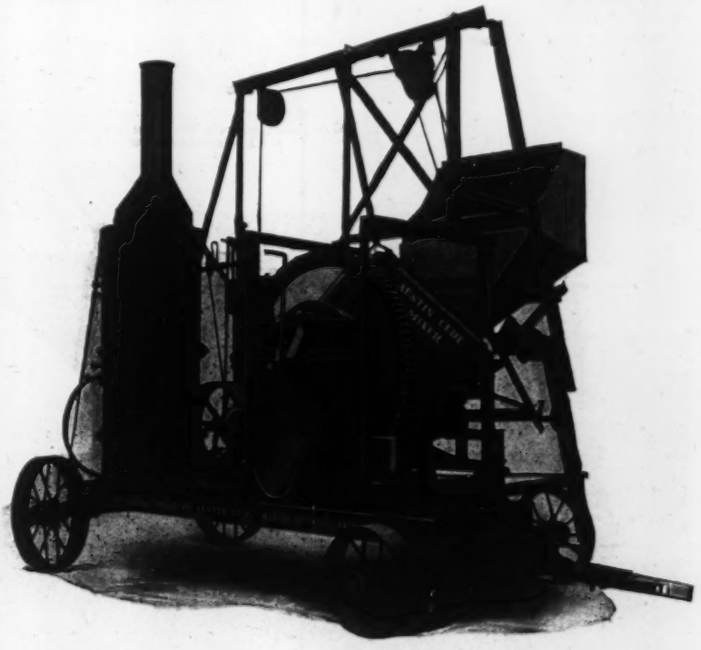


because it mixes "good enough concrete for this job" is an economic blunder. Suppose a "tin can" machine will mix good enough concrete for "this job"—will it mix good enough concrete for the next one on which the engineer is a little more particular, or good enough to give you the preference over other contractors on another job under the same engineer?

The fact that a mixer will meet the highest requirements for concrete work is an asset even if at present one has only minor work on hand. The opportunity always comes for a better and bigger job and the certainty that your concrete plant is equal to the opportunity is a fund of confidence and strength that counts in dollars and cents. Don't forget that the difference in price between the **best mixer** and any one of the score or so of inferior mixers is not one hundredth part as great as the difference in quality and efficiency. The selling costs of marketing a cheap, inferior mixer are just as great as for the higher-priced machine, and the buyer of a cheap mixer does not gain one penny in this item. The shop cost of the inferior mixer is lower simply because of less intrinsic value in the design, materials and workmanship. The logic is clear—one pays less for a cotton suit than for all wool, but he gets only cotton.



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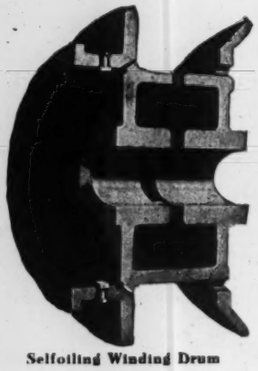
Our Proposition—

We will put a Milwaukee Mixer on your work for a period of five days.

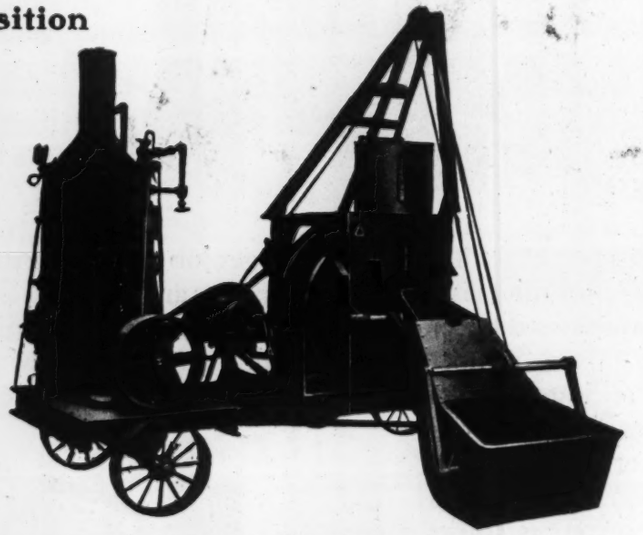
You are at liberty to test it thoroughly in every kind of work. Don't oil it—Abuse it—Give it the stiffest trial you know how. If, at the expiration of this time, you are not fully convinced that it is all we claim and superior to any concrete mixer in the market; return it to us and we will pay freight both ways.

Isn't that a square deal?

A Square Deal
Read Our Proposition



Selfoiling Winding Drum



Milwaukee Concrete Mixer on Steel Trucks, Equipped with Steam Engine and Boiler, Automatic Hoisting Bucket and Water Tank

Selfoiling Tracker Wheel

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This is the greatest improvement in concrete mixers in years. All our machines are now equipped with a positive self-oiling device for winding drum and tracker wheels. Ordinarily a concrete mixer must be oiled several times a day. The Milwaukee Mixer with this new device requires oiling only **ONCE A MONTH.**

Write for full details about this oiling device or a Milwaukee Mixer on trial.

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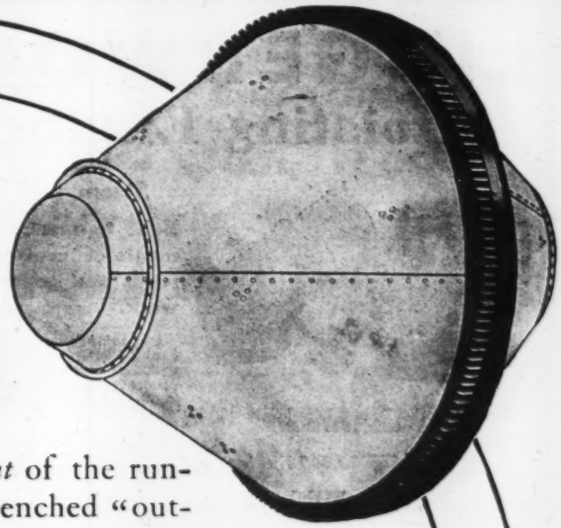
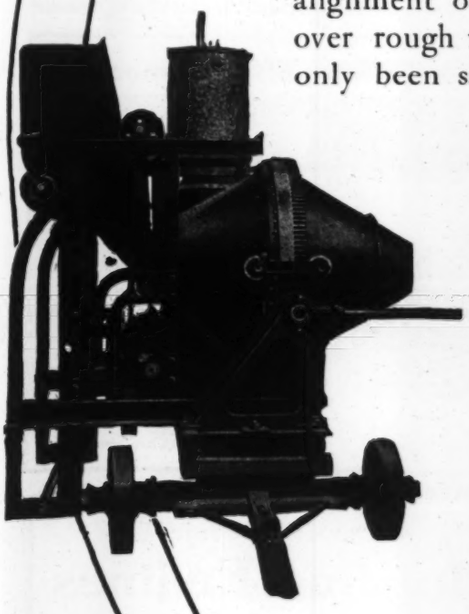
Mixer Health



is largely dependent upon the *proper alignment* of the running parts. When rollers and gears are wrenched "out-of-true," they soon wear out. How to preserve perfect alignment of a portable outfit, constantly wrenched by hauling over rough roads, is a grave problem in mixer design, which has only been satisfactorily solved in the



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All the supporting and guiding rollers travel upon the *central drum ring*, which also affords the obvious advantage of a *central drive*. The drum, with its driving and guiding mechanism, is set in a swinging frame, *independent of the truck*. Simple of alignment, the roughest road cannot disturb the position of the rollers and gears. These things mean *Mixer Health*, and a healthy mixer saves you money. Write for catalog No. 51, description of our 1910 Smith Mixer.

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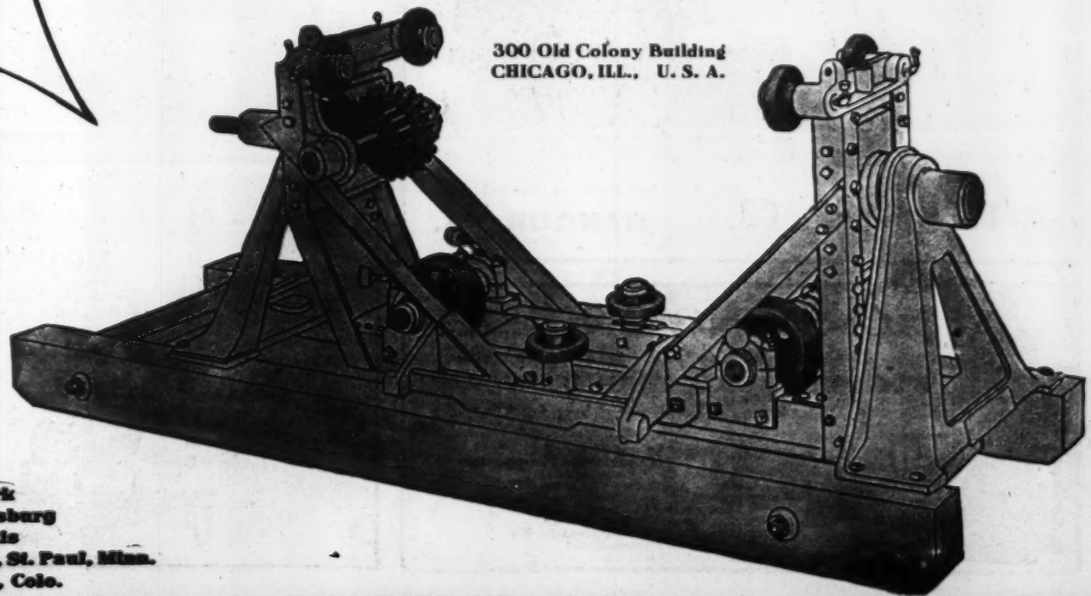

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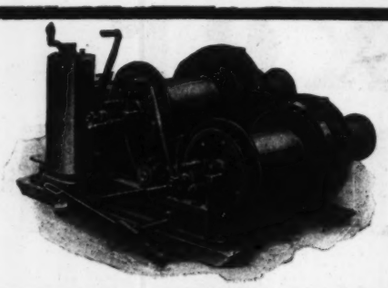

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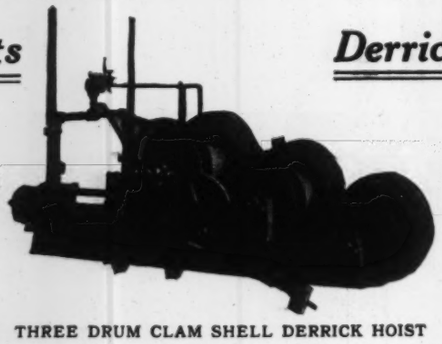

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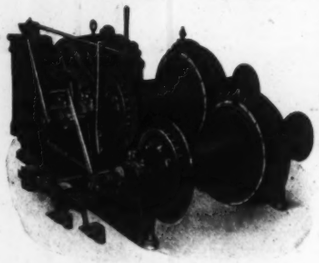

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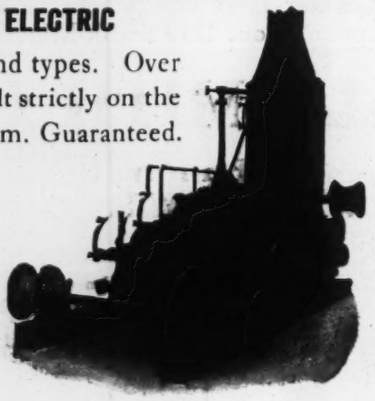

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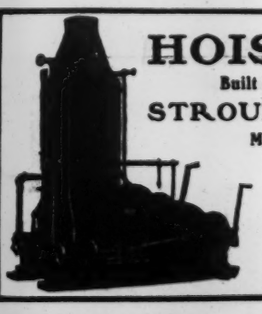

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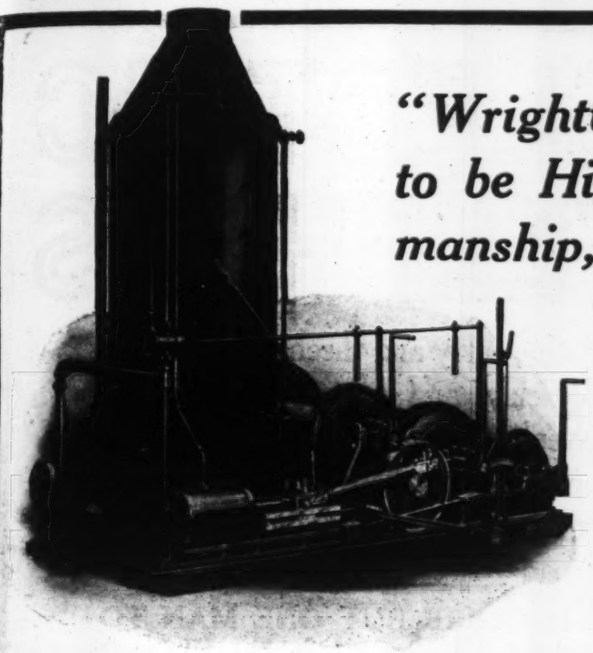

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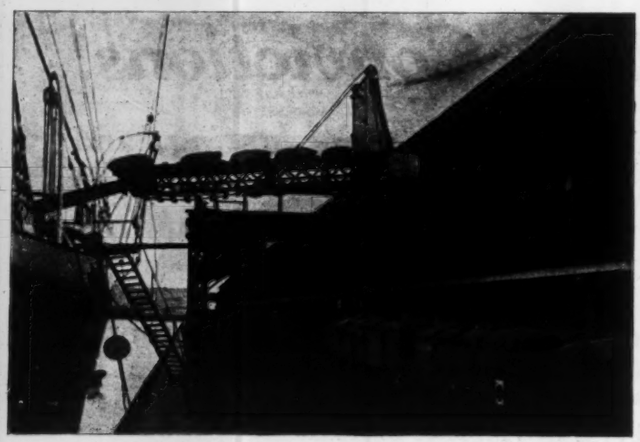

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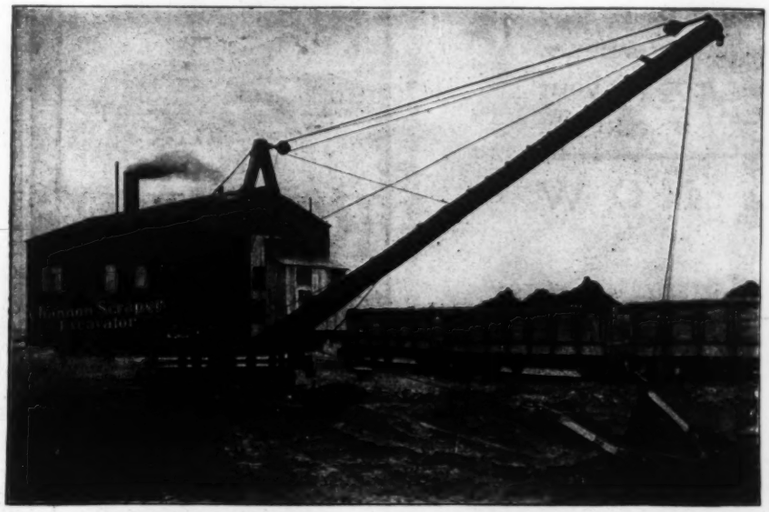

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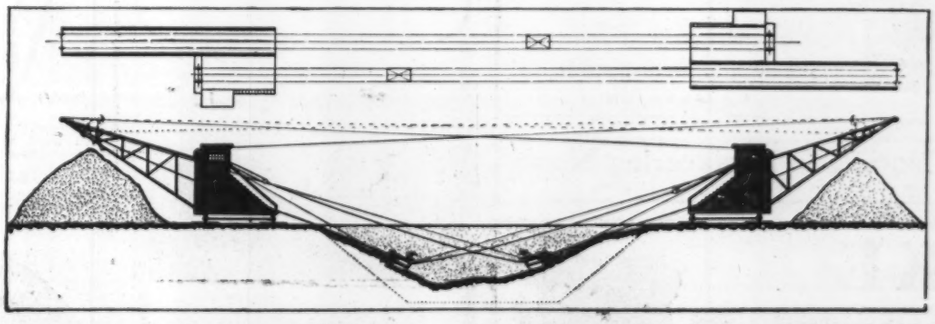

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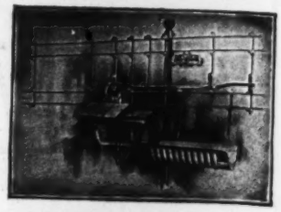

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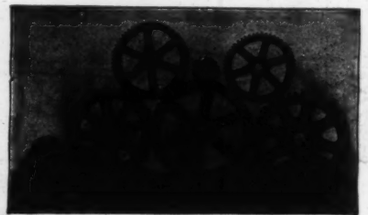

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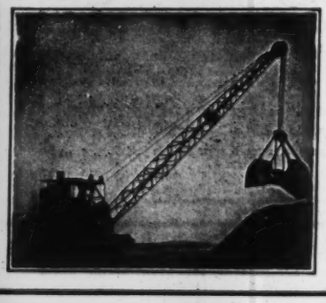

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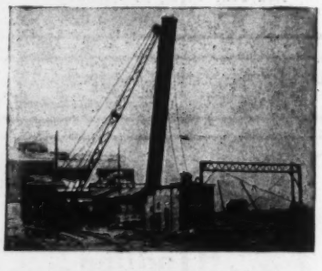

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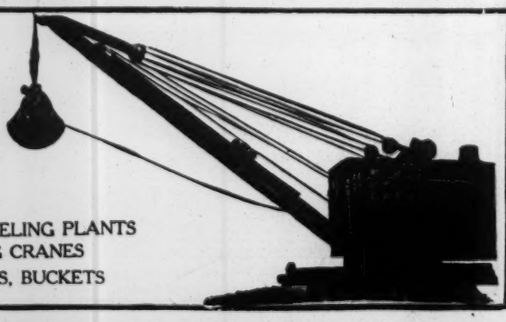

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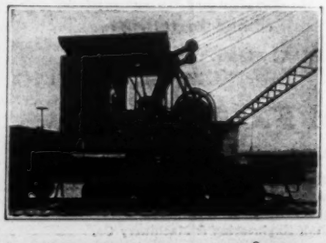

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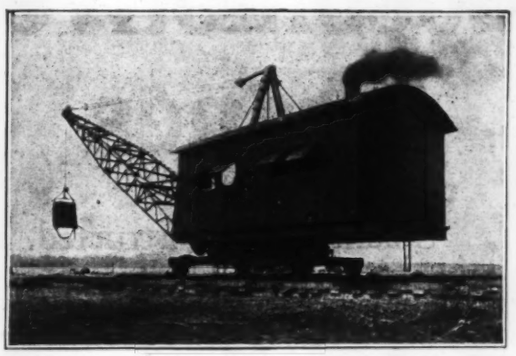

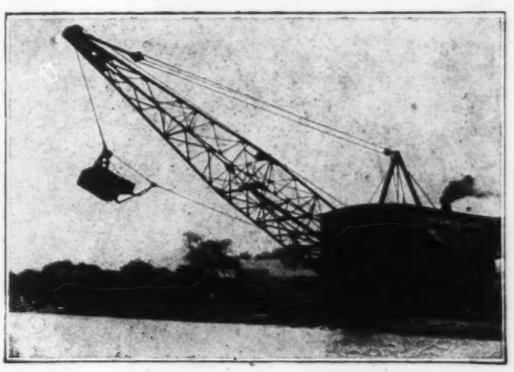

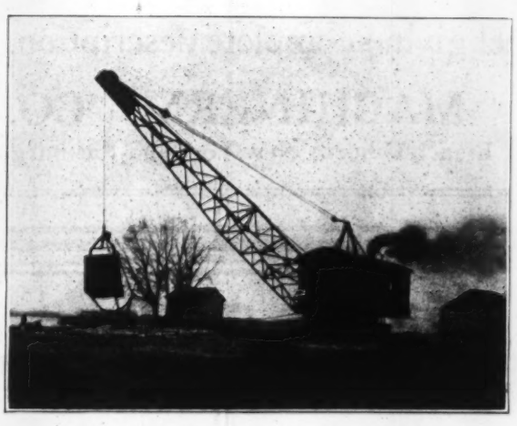

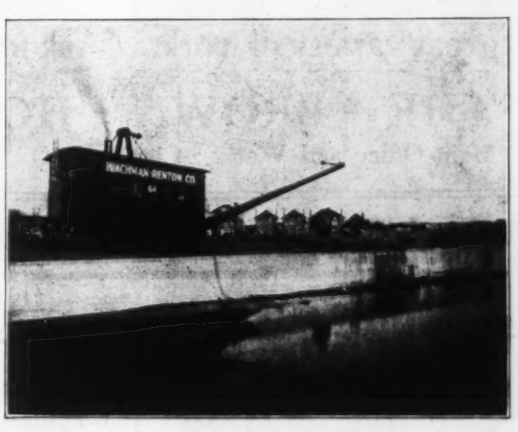

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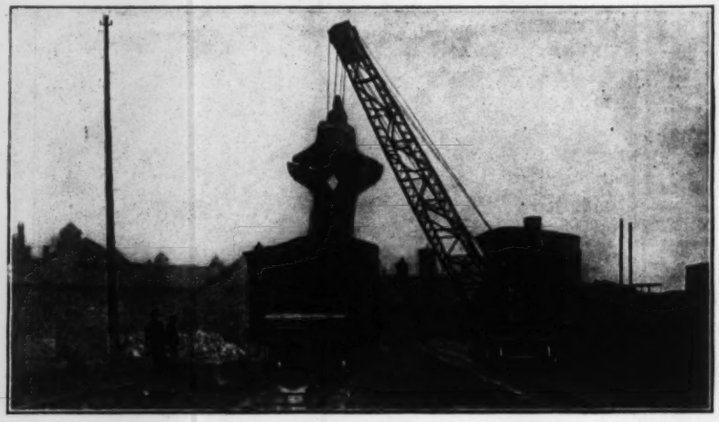

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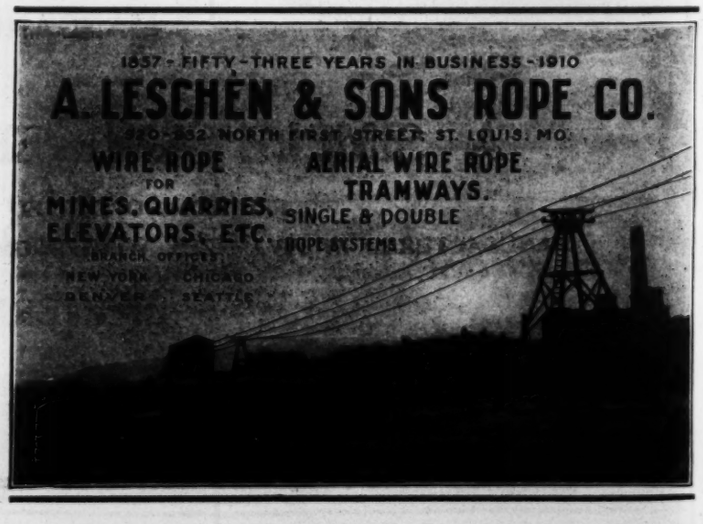

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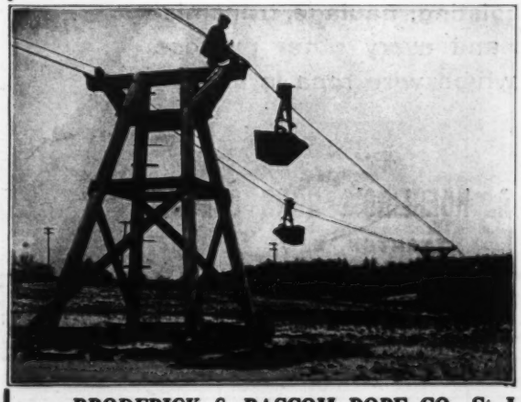

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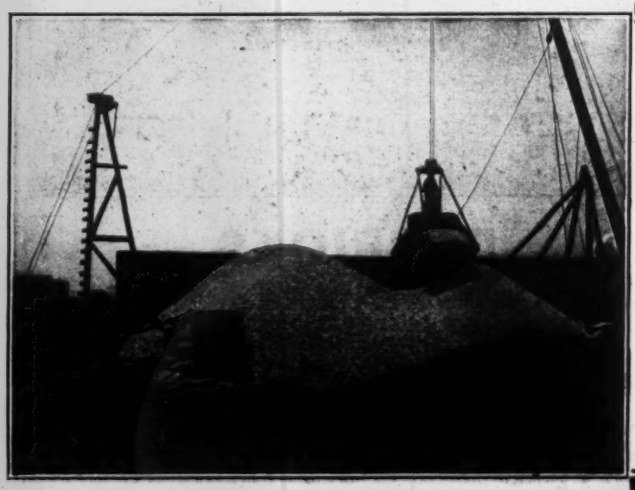

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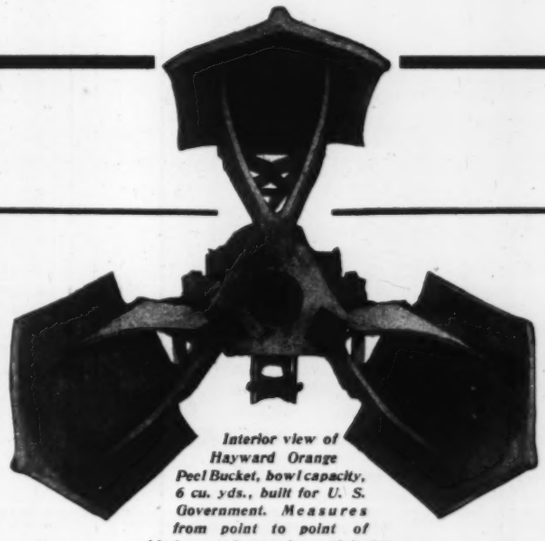

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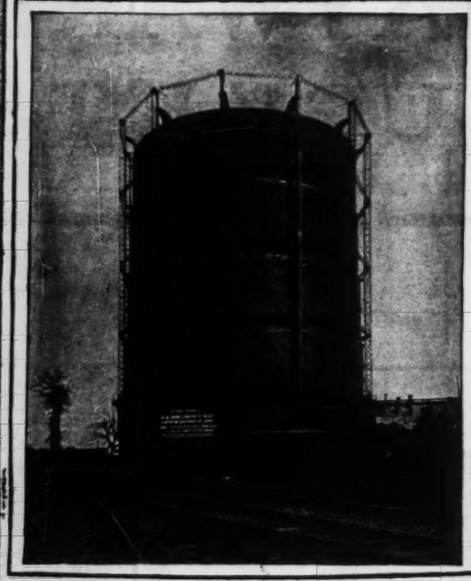

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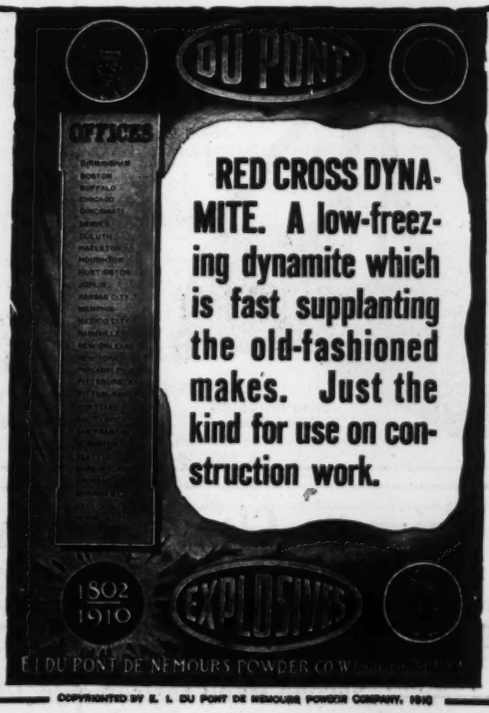
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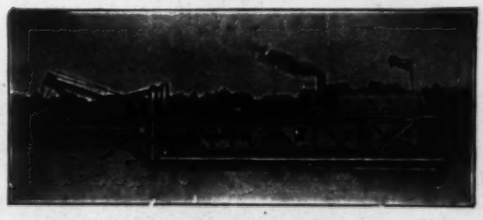

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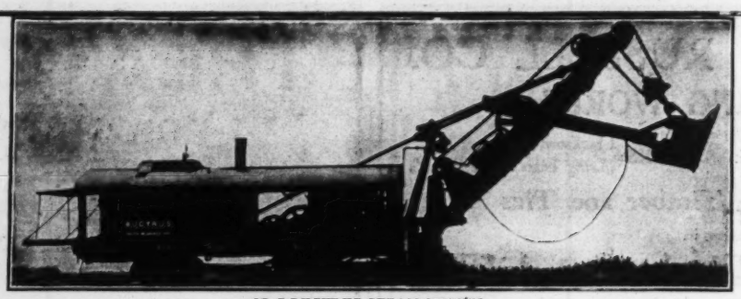

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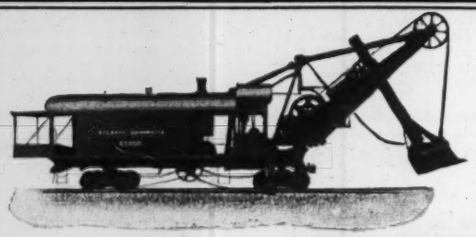

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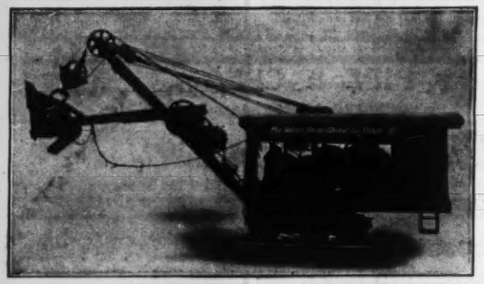

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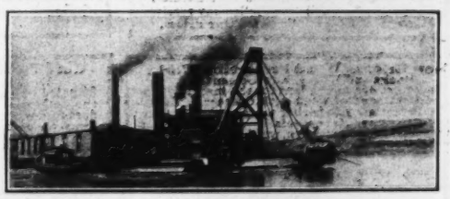

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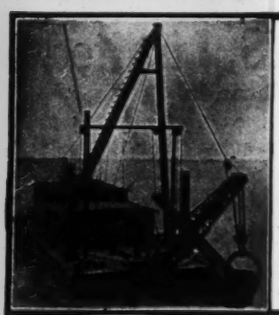

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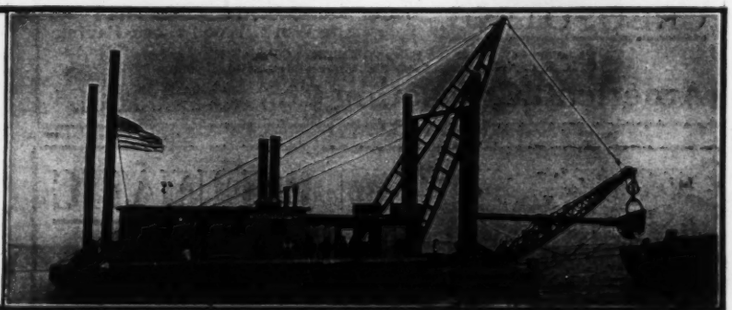

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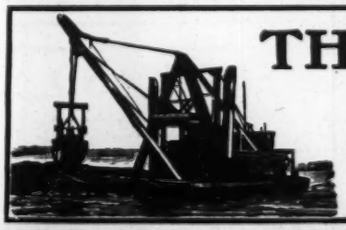

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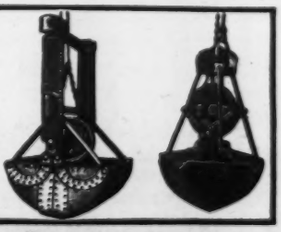

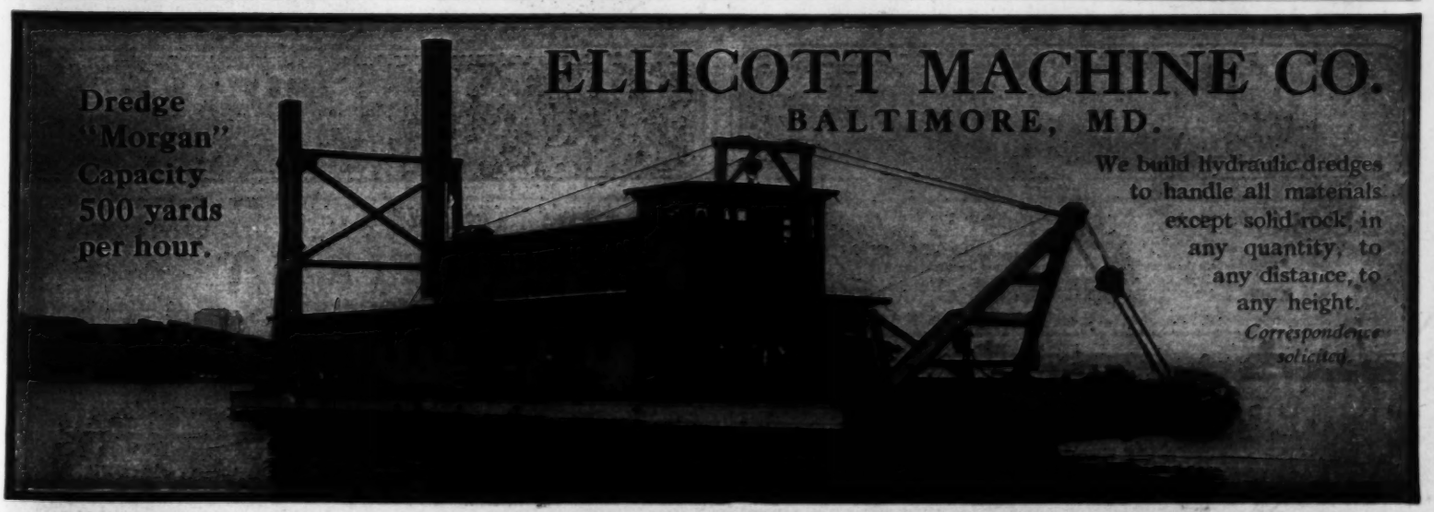

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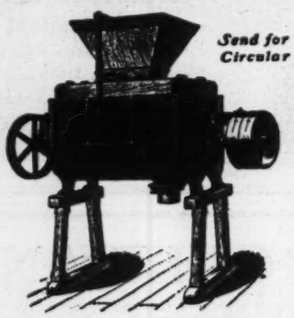

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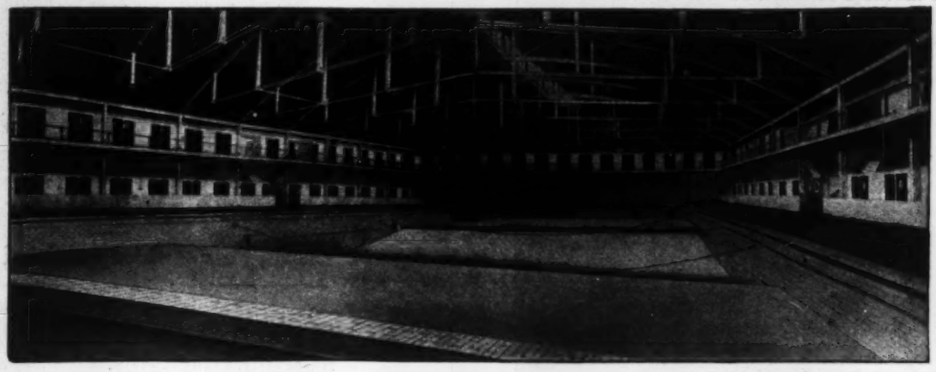

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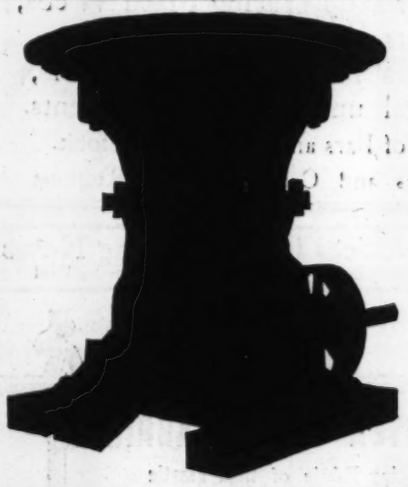

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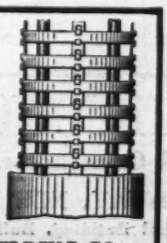

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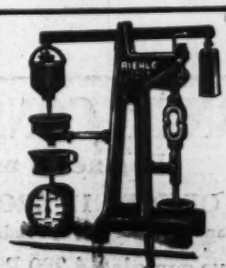

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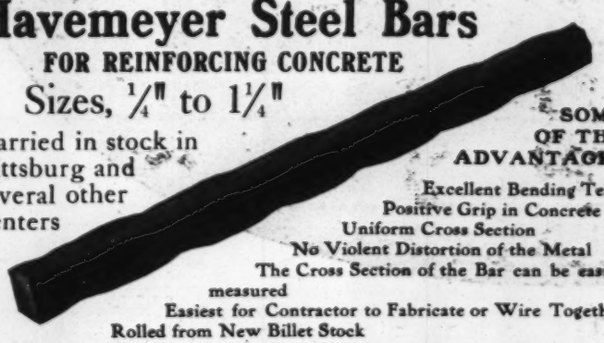

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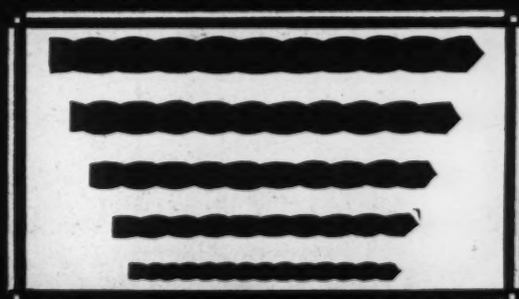

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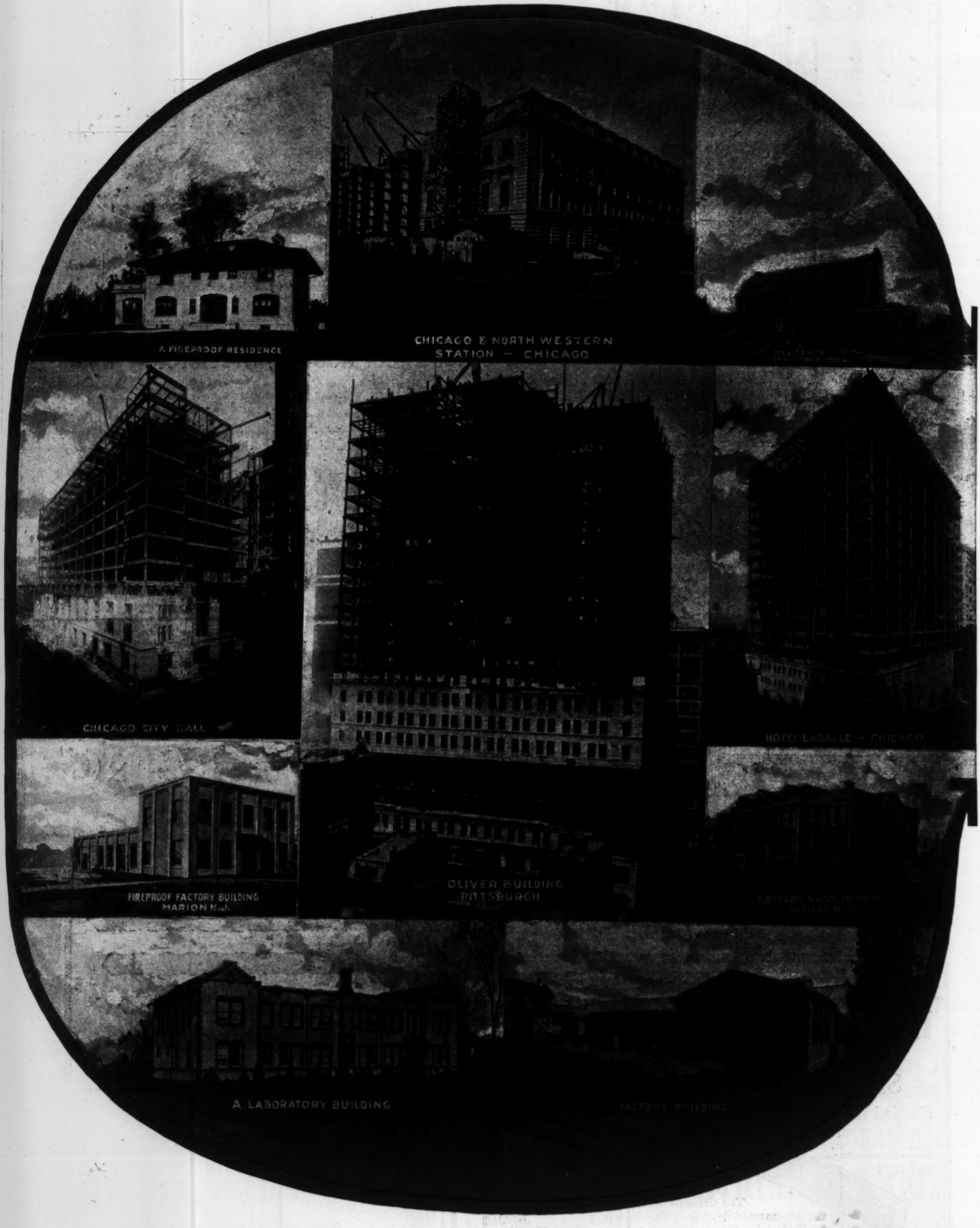
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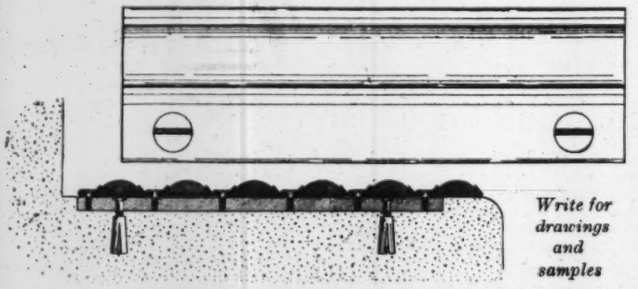

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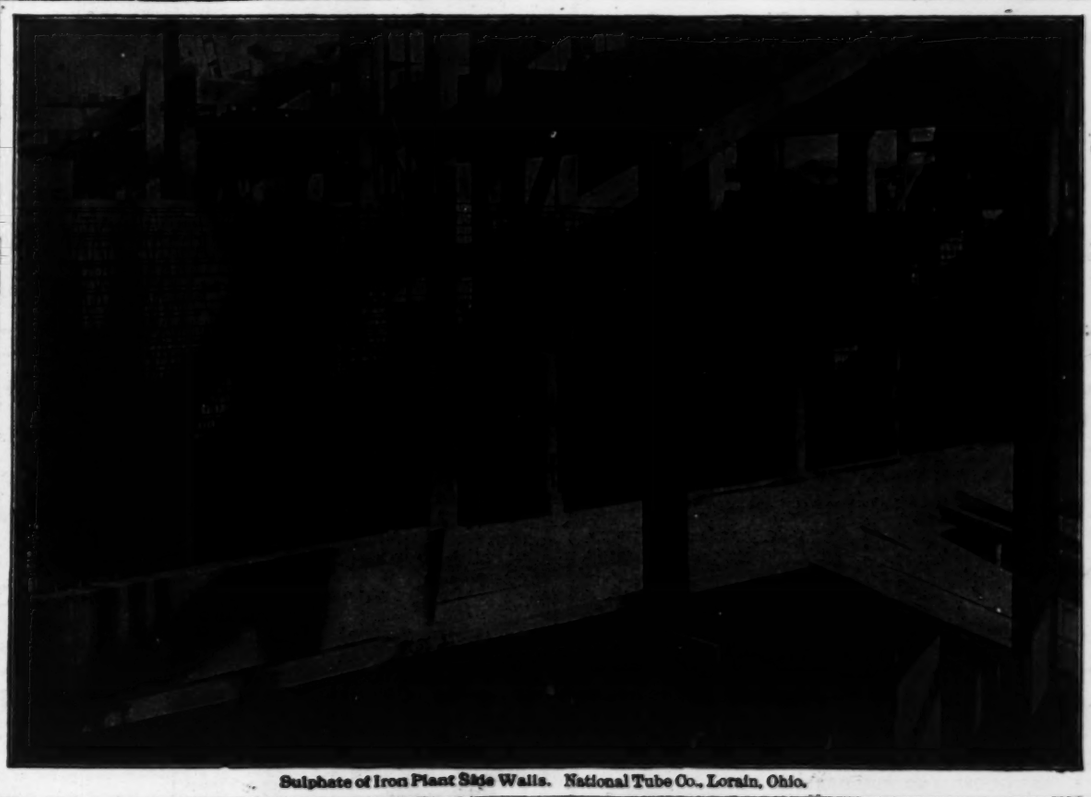

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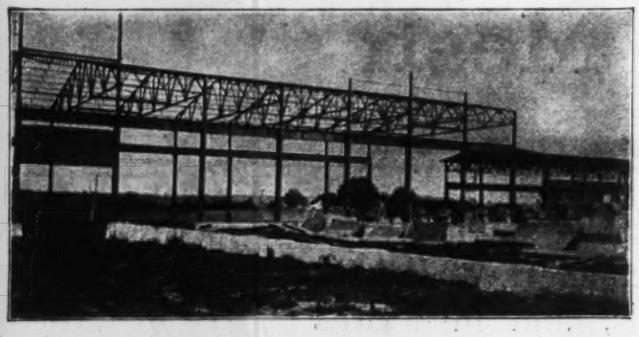

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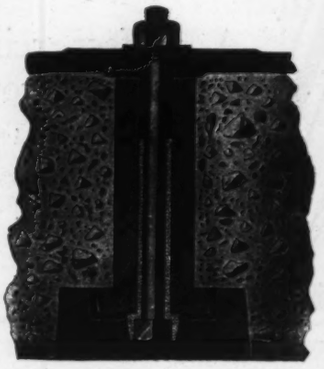

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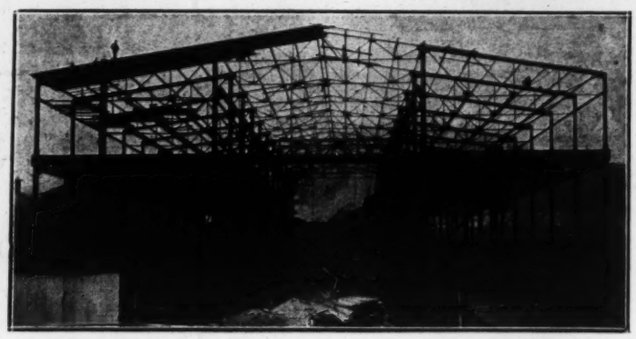
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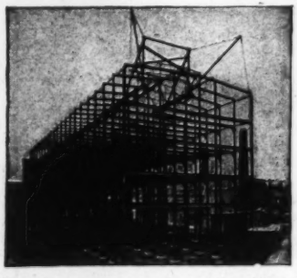

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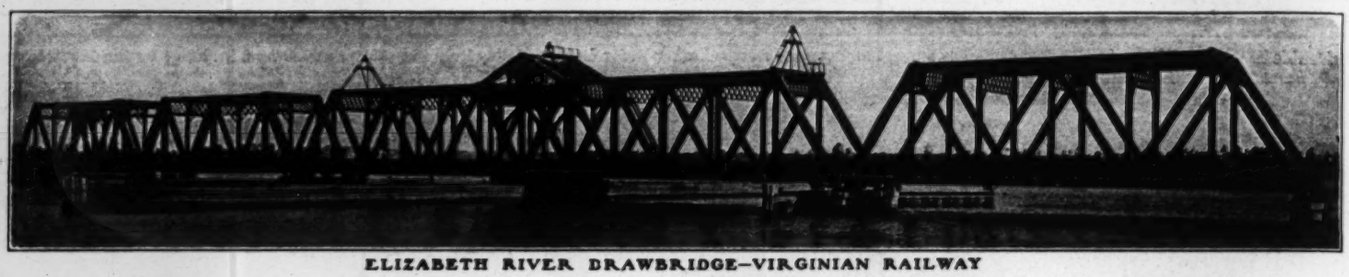

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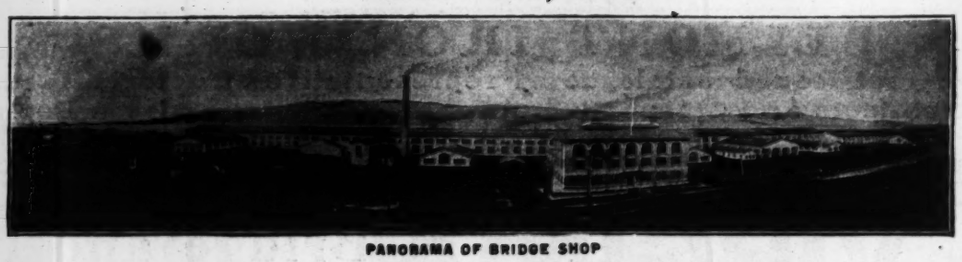

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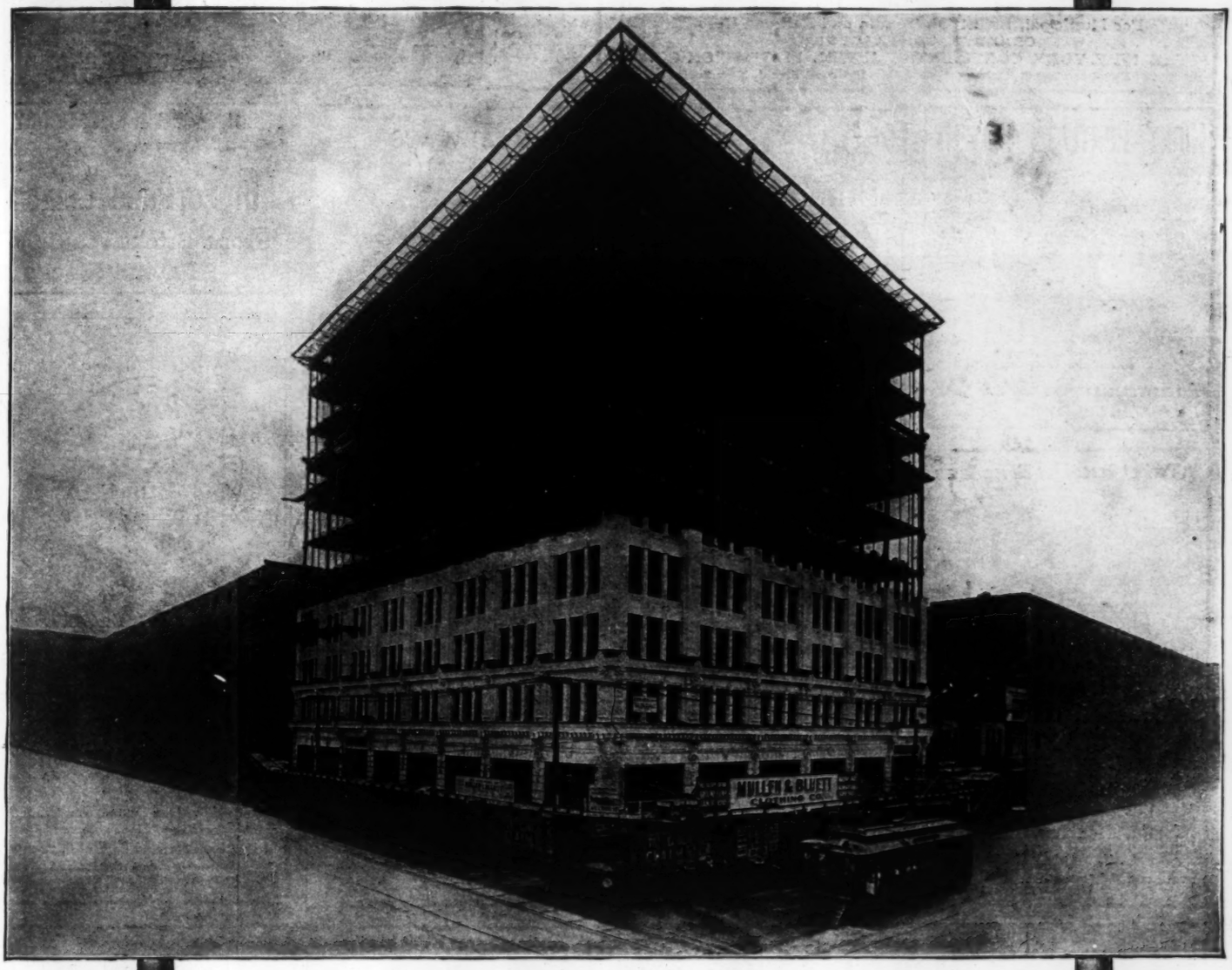

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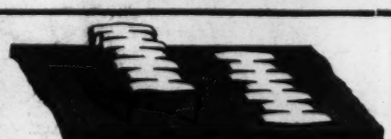

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